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The Gentleman's Magazine

JANUARY to JUNE 1881

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THE GENTLEMAN'S MAGAZINE

JANUARY 1881.

THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER I.

“LOWLINESS IS YOUNG AMBITION'S LADDER.”

THE teller of this story has a strong objection to the mysterious in fiction. He is quite willing that the personages in the tale should get involved in bewilderment and confusion as often as occasion requires. But he holds to it that the reader ought to have a clear understanding all the time of the real meaning and explanation of everything that seems a mystery. Some of the plays of an otherwise not very meritorious dramatist, the elder Crébillon, always seem to him in one part of their arrangement to furnish a pattern to the composers of all fiction, whether in the form of the drama or in that of the romance. Crébillon filled certain of his plays with puzzles. Nobody came out in the end to be the person he seemed to be. Either he was passing off for somebody not himself, or he honestly believed himself to be somebody that he was not. Torturing complications thereby arose ; but only for the people in the play. There was no torture for the audience. Crébillon, by one simple and bold device, saved them all pangs of conjecture and torment of doubt. The list of “personages of the drama” prefixed to each play carefully explained the identity of every character. Something of this kind was set out—“Alceste, a young man believed to be the son of the peasant Pierre, but in reality the son of the Count de l'Espée. Bianca, supposed to be a gipsy girl, but afterwards discovered to be the long-lost daughter of the Marquise de Monteville.” Thus the

audience were let comfortably into the secret at the beginning, and never had to turn mentally back and hastily revise their first impressions about any of the personages. I have long since forgotten all about Crébillon's plays, except this arrangement of his *dramatis personæ* ; but that has always appeared to me charmingly inartificial, straightforward, and deserving of the gratitude of men. In the story I am now about to tell, I shall, after my own different fashion, bear this principle in mind. Any little mystery that is in it shall be only for the persons who move in the drama, and not for the readers.

I would therefore ask those readers to turn back with me for a few pages to a period before that at which the connected action of the story begins. One glimpse at a quiet scene which passed some fifteen or sixteen years earlier than that day will be enough to put the reader in full possession of much that was a secret to men and women of whom the story is told, and which, if known by them in time, might have influenced so significantly their actions and their lives as to leave no story worth the telling. Yet even that scene, if it could have been looked on by some of the persons in the story, would not have made things as clear to them as a few slight hints of explanation shall make them to the reader. To learn that a man is not really what he professes to be, might, after all, give a very imperfect and misleading idea of the man's full character. It might lead to a stern, uncompromising verdict, instead of a recommendation to mercy.

On a soft evening of late summer, a young man and a young woman sat on a bench in a small public park just outside one of the great northern towns of England. They were apparently watching the setting of the sun. The sight was beautiful enough to have won the attention of any two young people, if we still cling to the fond idea that young men and women do really care much more for nature and her charms than the seniors with whom the world has been too much, and whose sun therefore may be supposed to have suffered eclipse. But this young man and woman were not really absorbed by the glory of the sunset. *He* was gazing at the west, to be sure ; but his eyes did not seem to follow the descent of the sun. *She* was not now looking at the sun ; she was looking at him. Her eyes were fixed on him with a wistful, devoted, uneasy look, like that which a French painter has given to the eyes of Sappho as she watches the countenance of her lover, and his unsatisfied gaze far into immeasurable depths of thought ; immeasurable, that is to say, for her, or at least not measured by her. Any one could see that this young pair were a pair—were married. No sister leans so on a

brother and looks into his face with a look like that, love she him never so tenderly. Nor, it is to be feared, does a young lover ever look so fixedly and so far away from the eyes of the girl he loves and has not yet been able to call his wife. These lovers were married ; had been married rather more than a year.

The young woman was pretty, winsome, anxious-looking ; she was clearly what would be called in the common acceptation of the word a "lady." The young man was strikingly handsome ; tall, slender, dark, and dreamy-looking. Even a man looking at the two would have admitted that the pretty pale girl was practically extinguished by the remarkable appearance of her young husband. Perhaps a not too keen observer might also have come to the conclusion that this handsome young man was not so distinctly a "gentleman," again employing a word in its conventional sense, as the girl was a lady. For all the well-dressed and graceful appearance of the youth, it still had something of what we cannot perhaps describe better than as the "glorified artisan" air. The powers of witchcraft would not have been needed to enable any one with his wits about him to reach the quick conclusion that the young wife had somewhat descended from her social position to get to the young lover, and that she adored him all the more.

"The sun is going down," the girl said. "Look, love ! he will be gone in a moment."

"Yes," the young man answered, without turning to her. "I didn't notice ; I wasn't watching him."

"I thought you were absorbed in the sunset ; I wouldn't have said a word to disturb you until he did sink. You ought to have been absorbed in *me*, and not in the sun ; but I wasn't jealous ; I quite forgive you."

"But you see I wasn't thinking about the sun," he said, with a smile, and turning to her for the first time. She almost blushed when his deep eyes rested on hers, and she saw that, for all his inattentive ways, there was genuine affection in them. "I was thinking of you—all the time ; all the time."

"Oh, come now, that I know is a story. I am sure you were not."

"Why do you think that ?"

"Well, for one thing, because you never looked at me or turned your eyes to mine all the time. No, no ; you were thinking of something else. No matter ; it was something great and good, I am sure ; and I wouldn't have you wasting your intellect always in thinking of a little ridiculous woman, even though she is your wife. So you may confess openly."

"Well," he said slowly, "it is true all the same. I was thinking of you ; I was thinking of both of us—of you and me together."

She gave a little shudder of pleasure, if such a word may be used, and clung closer to him in a nestling sort of way. The public park was very lonely now, at least in that part of it, away from the main thoroughfare and great open walks, and the young wife might nestle as closely as she pleased unseen of critical eyes. Even the sun was no longer there to look at her.

"Yes, I was thinking of us both. I was thinking of our prospects, and our future."

"Oh ! that !" she said. She was not so gladsome as she had been an instant before. "You are anxious and uneasy ; I know your mind is troubled ; you are not happy."

He said, "I want a career."

"A career, already !"

"Already ? Why, I am three-and-twenty ! and men have made themselves a name before that, already."

"I didn't mean in that way," she said. What she had meant was clear enough. She meant, "We have already been married little more than a year, and are you already discontented with anything ?" If she had been in better spirits she would have asked him, "Have you not me ? Am not I enough ?" But she was not in good spirits ; something seemed to oppress her ; she was silent for the most part, and occasionally inclined to be tearful, for no reason that she could well have explained. Nothing was said for a moment or two, and then she began:—

"But you have good prospects, and we are very happy ; why should we want anything more—now, at least ?"

"It won't always be *now*," he replied a little impatiently ; "and you don't know, you couldn't know, how impatient it makes one when he thinks he is capable of doing something and can't see his way to doing anything. Look here, love ; there are times when I begin to think I shall never come to anything ! I get it into my head that I have nothing in me—nothing, nothing, nothing at all. Then I feel as if I should like to kill myself. Yes, I do indeed. I am not talking nonsense."

"Then you couldn't be happy, even with *me*, if you did not have a successful career and show what you could do ?"

"No !" he said desperately, "I couldn't be happy ; it is no use trying to get over that. I couldn't be happy."

"You don't really care about me ; not as I care about you. I could be happy for ever with you—anywhere, anyhow."

"It is because I do love you that I couldn't be happy without showing that I was worth the love of a woman like you. You could be happy with me anywhere? Yes! but there is all the difference. You have given up everything for me—your people and all; I have given up nothing; I had nothing to give up. I want to show that I am worth something, and that you were not quite mistaken in throwing yourself away on me. That is why I feel so wild sometimes. What if things go on to the end just like this——"

"Oh, if they only would!" she said.

"Yes, yes, in that way it would be happiness, of course, of course; but I mean if they go on to the end without my doing anything to make a name, and your people see that you have married only a commonplace creature, the son of a man who keeps a livery-stable—and himself an office clerk! rather than that, darling—I hope you will be crying over my grave."

"For shame! I don't believe you love me at all. You are only thinking of yourself, not of me. What do I care whether you make a name or not, or people admire you or not? I married you because I loved you—you yourself, and not what any one else—the world or whatever it is—might have seen in you. I saw my happiness in you, I thought. That was enough for me."

"Don't be angry, darling," he said soothingly; for he was very fond of her. "Things will come all right. I'll make myself something of a name. You shan't be always talked of as the office clerk's wife; the livery-stable keeper's daughter-in-law. I'll make a name. I'll be known in the world; you shall be proud of me yet!"

She was chilled and hurt.

"It is not well to set one's heart on such things," she said. "'Fame flies the pursuer and pursues the flier,' I used to read somewhere; I think it was in some school exercise. One may go up like a rocket."

"And come down like the stick," he said, smiling contentedly. "Very well; I should like even that better than nothing. The rocket does go up, don't you see, and flames and sparkles, and people stop to look at it. What if it does come down? Everything comes down sooner or later. I'd rather be the rocket than the gas-jet in the office that people turn on when they like and off when they like, and never say anything about. Besides," he added more gravely, "I shall not be the rocket. I don't want to shine for a moment or two without any purpose. I want to be known as one who did great things for his fellow-man and the world; and I shall be known in that way some day. I don't want only to explode merely; I want to blaze."

"Wasn't there," she said, "one who blazed the comet of a season?"

"I don't know—I haven't read much poetry. But I should rather be the comet of a season than not blaze at all."

Then throwing himself back on the bench and clasping his hands behind his head with the manner of one who has settled a question, the young man sat in silence a moment. The girl was silent, too; she looked up at the pale sky in which some faint specks of light were already seen. The young wife's heart was sinking within her. She was egotistic, like all loving women, and she had been under the impression that her love would be career enough for her husband. He, too, was egotistic, but in a different way.

He had repeated with literal correctness the facts of his birth and his bringing up. He was now a clerk in an office. At the time when he was first put into that position he felt as if his heart was swelling with pride. To be in an office near the Exchange; to be in a great dark room, with desks, and clerks, and messengers, with gas burning all day long in the winter months; to be spoken of as one of the young men from Aquitaine and Company's office, seemed to him to open a glorious career for young ambition. For his father was a livery-stable keeper, and it was by the favour and kindness of a patron whose carriages the father took care of that the youth was lifted from his lowly situation at an age much more mature than that at which boys usually begin to learn business in such a town, and set with his foot on the first round of commerce's ladder to fortune. The town in which he lived was one where colossal fortunes are made in a few days, and truly are often lost again as quickly, and then sometimes remade; where the unknown adventurer of last year is the great luxurious ostentatious merchant prince of to-day. What might not genius and courage do in such a place?

Meanwhile, however, the young man had only his foot on the first round of the ladder. For some time his actual duties were hardly more dignified than those of a messenger. He did not find that he was developing much genius for mounting quickly. He seemed to be very far away indeed from the notice not merely of any of the principals, but even of the superior clerks. While he was still with his father, looking after or trying to look after the livery stables, the father had been in the habit of giving lessons in riding to young ladies and gentlemen, and sometimes the son in his absence had taken his place. He gave lessons in a riding-ground specially laid out for the purpose, and he took the pupils out for training gallops along the roads and in the public park. The boy could ride like a

young centaur. He seemed to manage his horse as unconsciously as he managed his breathing—he breathed, and he rode. One of the girls who took riding-lessons of the livery-stable keeper was the daughter of a distinguished advocate and Queen's counsel, Mr. Fanshawe, who came of good family, had a great practice, and, being a northern man by birth, had bought a property near the town where the livery stables were kept. This daughter got her lessons in riding mostly from the livery-stable keeper; but sometimes, too, from his son. These two fell in love. After the young man was transferred to the office they corresponded, and occasionally contrived to meet. He succeeded in convincing her that he was a man of genius in a position wholly beneath him, and before whom one day the world must come to bow down.

Why had he got it into his head that he was a man of genius and a master-spirit? He had as yet done nothing. He had not even written poems or essays or begun a tragedy. He had not made speeches. He was curiously ignorant on most subjects. His reading had been only a few biographies of men who had risen from lowliness to greatness, some metaphysical books of a cheap and easy kind, the "Count of Monte Cristo," and a life of Mahomet. At the office even the clerks of his own age thought him a stupid fellow. His father never could make much of him, and feared he was hopelessly incapable of getting on, but overlooked all his defects because of the memory of his mother, who died young. Yet it was settled in the young man's mind that he was a child of genius and of destiny, and that the world was yet to hear the loud echo of his tread. Most ambitious and clever or silly young men, when they have such convictions about themselves, have also in their minds some idea as to the path along which they are to move to greatness. One believes himself a poet, another a statesman, another a Michael Angelo of the future, the coming Garrick, the Cæsar of the modern time; but our young man had no set notion of this kind. He had not yet made up his mind as to the sort of greatness he was to have. He was not clear even as to the sort of greatness he should wish to have. He only said to himself that greatness was his destiny, and left Fate to do her duty. Perhaps it was his figure; perhaps his beautiful deep, dark, dreamy eyes; perhaps his singularly handsome face, looking a little like that of a young Lucifer before the rebellion and the fall; certain it is that he easily convinced Miss Fanshawe that in loving him she loved dawning genius and predestined greatness.

It was not for that Miss Fanshawe loved him. She did not care whether he had genius or not, whether he became great or remained

small. She loved him because she loved him : loved him for himself. So she at last "kicked over the traces," as the livery-stable keeper expressed it, and married her lover in defiance of her father, mother, and all her friends. From the day when she left their house secretly to be married, her father and mother never saw her again. Not that they would not have been reconciled with her in time ; but they waited for her to submit, and she waited for them ; and some months beyond a year passed away, and then their daughter was dead. She died a few days after the scene in the park, in child-birth—if that can be called child-birth which brings forth only a dead child.

Had she in the later days of their married life been touched by any doubts as to the true worth of her idol? Probably not. Probably she had only been hurt now and then at the thought that love was not enough for him. It is all the same now—she is gone for ever.

On the very morning before her death, the child of genius received a formal dismissal from Messrs. Aquitaine's office. He was considered incapable and idle, and they would have no more of him. He sat all the night with his dead wife and his ruined hopes. He had not gone near his father for months and months, proudly convinced that they were not made for each other ; and he would not go near him now. He sat all the night alone and steeped in thought. All had gone from him. He was down to the lowest deeps of depth. He had not a friend on earth. He had only a few pounds in money, and even that was the poor wreck and remnant of some money *she* had had left to her by a relative in days when there did not seem the slightest probability of her ever having any occasion to spend it. Such was his state. Clearly, if he was to be taken in hand by Destiny, the time had about arrived when Destiny ought to be looking after her charge.

At the funeral of his wife, his father presented himself. They exchanged a grasp of the hand—very warm on the father's part. The livery-stable keeper asked him to come to his house and stay there. He said he would go there later in the day ; and the father felt for him and quietly left him, expecting him to come in the evening, when perhaps he should have calmed down a little. But he did not come that day, nor the next. He never came. He never wrote. His father might have supposed that his son was dead, perhaps had killed himself, but that an acquaintance had seen the young man going on board a steamer, and the young man had told him hurriedly that he was leaving England. He always did things in an odd sort of way, the father said. Anyhow, he was gone.

CHAPTER II.

HELENA AND HERMIA.

CHANGE is rapid in the seaport town where the two married lovers saw the sun set that evening fifteen or sixteen years ago. There are many quiet inland towns of England even still—for all the railways, and the telegraph, and the electric light—where no greater innovation has been made within that time than the adornment of the principal inn with a new sign, or at most the starting of a rival hostelry. But in this busy, unresting place of which we are speaking, new suburbs, stretching for miles, have grown up; acres of newly built docks have encroached upon the river's banks; sweet spots that were greenwood by the water in the love-making days of pretty Miss Fanshawe are now occupied by factories and warehouses; the very park in which the lovers sat that evening was cut up soon after and parcelled out in lots for building, and is now fully built over. The park was not large enough for the increasing population, and a splendid new park, of much larger extent and greater pretensions, was opened at the opposite end of the town. On the very spot where the poor absurd child of genius sat and bemoaned himself that he had not yet found a career; where his young wife looked up into his face with anxious eyes, that might have been lit by corpse-candles, so ominous was their gleam—on that very spot now, perhaps, some happily married pair were settled down under their own roof-tree, and gladsome children were playing in the nursery. In our civil life, new crops of houses and hearths grow up on the field where lovers, seeking solitude, were glad or grieved once, just as grass and flowers spring up on the plains where a battle has been fought.

The public park of the past day had been planted in one of the most beautiful suburbs of the town. It stood on the slope of a very gentle hill, and was sheltered from the east wind which vexed people a great deal in the long and chilly springs; and it looked at one side across the river, there safe even still from the incursion of the dock and warehouse builder. The river was broad there; as it went on through the town, it spread out into a mighty estuary; but even here it was a noble stream. So the place where the park had been was turned into the site of one of the favourite nests of the local aristocracy—the men who had made fortunes in shipping and on 'Change, and in all manner of commercial adventures and enterprises. They built themselves lordly pleasure-houses there. They built "detached villas," and each man called his villa by some com-

manding name. They had conservatories and bright gardens below and observatories on the tops of their houses. Some loved great flights of stone steps, with peacocks parading themselves on terraces. As time went on, and fashions in building began to change, some had fantastic houses of red brick, made more intensely Queen-Anneish than anything of Queen Anne's day could possibly have been, or, even for that matter, than Queen Anne herself. Little windows started out like Jacks-in-the-box exactly where they might least have been expected, with bars across them where there was not the slightest necessity for such precaution. Glass was specially manufactured of a thick greenish dinginess, and with bull's-eyes elaborately wrought in, so that the known imperfections of the glass-making craft in the Augustan age of English letters should add to the reality of the careful imitation. It was said by the friends of one of the enthusiasts in the cause of this architectural revival that he had little mechanical spiders ingeniously constructed to run up and down some of his window-panes, in order to give to his mansion the greater air of eighteenth-century realism, by suggesting the domestic untidiness of the days of Dean Swift. But this seems only like the foolish pleasantry of some outshone rival. It was probably just such a piece of idle invention as the story told of a lover of art in the same quarter, who had his own portrait done by a great London artist, and when it came home had it put up one of the chimneys for some time, to smoke it into respectability of appearance, and then spent a whole evening bending and cracking it in all directions, so that its surface might seem like that of some of the masterpieces he had seen in the National Portrait Gallery.

One, at least, of the red-brick houses in this region was really modest and tasteful in its style and all its arrangements. It wore its Queen Anne garb with the quiet ease of one who, having chosen a suitable fancy costume for a masquerade, is able to wear it properly and becomingly. This house belonged to Mr. Aquitaine, head of a great firm of shippers. Mr. Aquitaine was of Huguenot descent. His people had been settled in that seaport since the revocation of the edict of Nantes, and had always prospered there. The family now counted among the oldest in the town, and the name had actually become associated with the place. It brought to the ordinary Englishman now no suggestion of Huguenots or foreign origin, but only told of the town in which Mr. Aquitaine lived. His name and that of his family were known all over the world where trade was heard of and ships came into port. Mr. Aquitaine had travelled much in his time, but never called it travelling or thought

of himself as a traveller. He had even done some African exploring, for the interest of the thing, but he never for a moment regarded himself as an African explorer. Ever since he was old enough to be of any use to the great house, he had been in the habit of going off at a moment's notice to any part of the world whither it might be necessary to despatch him. He went to New York or San Francisco as another man might go to Edinburgh or to Paris. He talked of "the last time I was in Melbourne—no, the last time but one, I think it was." If somebody asked him how some friend was getting on in Japan, he might perhaps answer carelessly, "Well, really I don't quite know; I haven't been in Japan for more than three years; I don't go there now." When the diamond fields were discovered in South Africa, he went out two or three times just to have a look at them. He was very glad of the annexation of the Fiji Islands, and remarked that every time he went to Fiji he was more and more impressed with the value of the resources and the position that were neglected there by the English Government. But he was not the least in the world of a wanderer. He never went anywhere without some practical purpose. He belonged, roughly speaking, to all the local boards and institutions of his town. He subscribed to everything. He made no distinction of creed in his gifts and charities, and spoke on the platforms of all denominations in turn.

Mr. Aquitaine was now about sixty years old. He wore a short, thick, white moustache and no beard. For all his generations of family settlement on English soil, he still had a great deal of the typical Frenchman about him. With a slight change of garb, say to a shabby outworn semi-military undress, he would have been just the sort of man one might expect to meet near that building in Paris which the English lady in "*Peregrine Pickle*" calls the "*Anvil-Heads*." Yet he regarded himself as intensely English, and was in all his views of things, political and other, the most inveterate and uncompromising John Bull. He did not like the Americans; he detested the Russians. He had a poor idea of the Germans. His general notion of the way for England to solve any difficult question in foreign affairs was to occupy some place. His way to improve any uncivilised country was for England to annex it. He had always had great ideas of things to be done in the Levant and in Egypt; and he had done one great thing for himself in the Levant: he had found a wife there. He fell in love with a girl in Rhodes, a sort of Greek with an English mother, and he married her and brought her home. She was at that time beautiful, but she had fallen a good deal out of

shape lately, and did little more than stay at home, lie on a sofa, and receive her friends. She was at least ten years younger than Mr. Aquitaine ; but he had not lost one fibre of his youthful energy, and she had not a fibre left of hers. They had been married very nearly five-and-twenty years, and for five years had had no child. Then Mrs. Aquitaine had one daughter, and they had no children after. They lived very happily after their fashion. Mr. and Mrs. Aquitaine hardly ever saw each other alone except at night, and not always even then. He would not have her disturbed, and she liked going to bed early. He had therefore a bedroom fitted up for himself on the ground-floor, and whenever he was disposed to sit up late or to rise specially early, was starting off on a journey, or had just come back from some expedition, he betook himself to this room, and so spared the quiet habits of his wife. The house was always more or less full of company. The family never by any chance had it all to themselves. The three would hardly have known it or themselves under such conditions.

A young lady is mounting a flight of stairs in Mr. Aquitaine's house one bright morning in the early spring : she is running very briskly up, and evidently is not troubled with shortness of breath. She is a good-looking girl with a certain serious look, and a way of slightly puckering her eyebrows every now and then as though she were in earnest about things. She had evidently been out-of-doors, for she wore a hat, beneath which only a little of her carefully tucked-up fair hair made its appearance. She reaches a door and knocks : no answer comes from within. Then she called "Melissa !" two or three times, and knocked a little more sharply. A faint voice seemed to be heard, languid, and far away.

"Melissa ! may I come in ?"

Another murmur was heard, which the young lady on the outside assumed to be assent. At all events, she tried the door, found that it was not locked, and went into the room. It was a very large room, and she looked about with a puzzled air.

"Where on earth is the child ?" she said aloud.

The room was not furnished after the fashion of sleeping-chambers in the days of Mrs. Masham and Sarah Jennings. It was all got up in some combination or jumble of various Eastern fashions. The ceilings and the wall were painted after the style of a great Moorish building. The floors were tessellated marble, with scattered pieces of Turkish carpet, and piles of cushions here and there. One corner suggested Damascus, and another Delhi. It was very Oriental—almost as much so as some of the Oriental courts in the Crystal Palace, of

which, indeed, it at first reminded Miss Sydney Marion, who stood, now looking at its various adornments, still holding the handle of the door, and hardly certain whether to go in or to back out. Opening from the other side of the room she saw a little passage, marble-paved and carpet-betossed too, and she could see that it led into a gorgeous-looking bath-room, the entrance of which was half draped by a carelessly gathered-up curtain. These decorations and appointments illustrated the tastes, not of Mr. Aquitaine, but of his wife and daughter. Was there no occupant of this superb sleeping saloon? Miss Marion looked around in wonder, and might have backed out altogether, but that a faint laugh drew her attention to one spot where she saw a curtain hanging before a sort of recess. She went up, drew the curtain, and discovered a small alcove with a most luxurious bed, and a very luxurious little demoiselle coiled up in it.

"Oh! there you are at last!" Miss Marion said, and she shook her friend by the shoulder.

A murmur only was heard.

"Get up, you dreadful lazy little girl; see how the sun is shining! It is so delicious; it's not like anything I ever saw before. Do promise me that you will get up at once."

The pretty girl languidly half-opened her dark brown eyes, and gave another toss or two in her bed, and shrugged herself together again.

"Do get up, Melissa! won't you, like a dear girl?"

"But I don't want to get up, Sydney. What's the good of getting up?—I've often been up."

"The lovely morning, the sun, the flowers——"

"I've seen the sun and the flowers, all sorts of flowers—I don't care about flowers—I don't care about the sun; I prefer the moon."

"But last night you said you would not come out to see the moon. You said you didn't care about the moon."

"I didn't then: but that was night. This is morning; that makes all the difference. Don't you see?"

Miss Marion laughed.

"I fancy it does make all the difference, and I do see well enough. What a tormenting little dear you are, to be sure! But I do want you to enjoy the morning with me; or I want rather to enjoy the morning with you. You'll come down, won't you, to please me? I am like the little boy in the old nursery story, or something of that kind, who went about teasing all manner of unwilling creatures, the sheep, and the dog, and the cat, and I don't know what, to come and play with him."

"Which am I—the sheep, the dog, or the cat?"

"Oh! you are none of these—the leopard kitten, perhaps; if such a creature is nice and lazy, and what people call aggravating; if so, there you are."

"Well, it's all right; I'll get up," said the lazy girl resignedly. "One must get up some time in the day, and it is as well to do it now as later, I suppose; that's philosophy, I should think."

"Hang up philosophy," said Sydney.

"Come, now, you are always telling me I say rude things and use slang words. What do you say to 'hang up philosophy'?"

"But that's a quotation, Melissa; it's from Shakespeare. Don't you know?"

"Then Shakespeare must have been a very vulgar man," the young lady said decisively. Having thus settled the question, she rolled herself up in a significant way and was silent, thereby implying that the sooner her friend left her the sooner she would get up and prepare to enter on the business and pleasures of the day.

"Just one word, Melissa: you won't go to sleep again?"

"Glamis," the young lady murmured from among her pillows—"that's *you*—hath murdered sleep, and therefore Cawdor—that's me; I know I ought to say 'that's I,' but doesn't it sound odd? and therefore Cawdor—that's I or *me*, whichever you please—shall sleep no more."

"I thought just now you seemed to know nothing about Shakespeare," said Sydney.

"That's not Shakespeare; it's Henry Irving."

"What a ridiculous creature you are! You know a great deal more than you pretend to."

"All right, dear; most people pretend to a great deal more than they know; I may want to redress the balance, don't you see? Well, I'll not go to sleep again. Would you mind sending Priscilla to me if you see her? or if you would just ring the bell for her before you leave the room, that would save a second or two, perhaps; and a second saved is a second earned."

Miss Marion laughed and rang the bell for Melissa's maid, and then left her companion, and went downstairs and out into the garden. The little sensuous maiden above-stairs hugged herself once or twice deliciously in her wrappings. The morning was mild and soft, and suggested no great need of nestling in bedclothes. But this was a young lady who immensely loved comfort and warmth and indolence, and harmless little luxuries and self-indulgences of all kinds. During the few moments which elapsed before her maid

came into the room she had changed her position several times; not that she found herself uneasy in any, but that even for that moment it delighted her to try for some posture of still greater comfort, to seek the ideal position of the moment. But when her maid came and told her her tepid bath was ready, she made a heroine-like effort and actually got up.

It may be safely asserted of Miss Aquitaine that she never yet had had one thought that lasted for a moment concerning any creature or subject outside the range of her own personal impulses, whims, and wishes. Her impulses were often kind and sometimes generous, and then she was kind and generous for the moment ; but she never thought of being kind or generous, or did anything, because it ought to be done. She was keenly sensitive to pain herself, but never seemed to have got far enough outside her own personal sensations to think whether others were affected by pain or not. She had not the least idea of the value of money, and, indeed, hardly ever had money in her purse, or even in her hand. Everything was bought for her that she wished to have ; many things were bought for her before she had time to wish to have them. Her father and mother had made her their little idol and fetish from the days of her birth. Having no other child, they were always wildly alarmed about the health of this one little treasure. . Up to the present hour it was an article of faith in the household that Melissa was in delicate health and required constant care. The girl never had a cough or a cold in her life, was ignorant of the pangs of toothache, and did not know that she had lungs and digestive organs. The superb strength of her constitution could not be better evidenced than by the fact that it had hitherto withstood all the attempts of her father and mother to keep her well, and all her own attempts to make herself ill. She ate and drank whatever she liked, and at any time that suited the whim of the moment ; lay in bed as long as she liked, sat up as late as she liked, took six warm baths in one day if she felt inclined. She often did feel inclined to paddle in her bath for hours together, like a South Sea Island girl plashing idly in her sunny waters.

Melissa took a long time to get bathed and dressed, and she did not hasten her movements in the least because of her waiting friend. She was very fond of Miss Sydney Marion, but she did not mind letting her wait. In fact, she never thought about the matter at all. Miss Marion was carried off to breakfast by her host, who assured her it would not be of the slightest use waiting for Melissa, as no one could tell when she would come down, or whether she would have any breakfast when she did come. Miss Marion was out again on

the lawn looking at the sparkling waters of the river, all wrinkled and rippling under the light spring wind, when her friend at last came to her side. Melissa was short and dark, with a graceful plumpness which might perhaps in some far-off time develop, as her mother's had done, into what blunt persons would call fat. Just now, however, no one would be likely to find fault. Melissa was a little beauty, and thought so.

"How you must love this river!" Sydney Marion said. She came from a quiet cathedral town, far inland. Her mother was dead; her father and sister were not now in England; she had been staying with an aunt until yesterday, when she came to pass some time with her father's friends, Mr. and Mrs. Aquitaine, and her school-fellow, Melissa. She had never been in their house before, and everything was new and delightful to her.

"I don't care a pin about it," Melissa said. "It's always the same dull thing flowing in the same stupid way. Everything is dull. Nothing ever happens. One gets awfully tired. I want something new. If only something would happen!"

"But something always is happening."

"Oh, no! oh, dear, no! not anything that I call something. I want something quite remarkable to happen."

"Well, something is happening that I call very remarkable. Don't you call papa's coming home, and coming to stay here, something remarkable? Don't you call our all going to London together something remarkable?"

"Yes, of course; yes, quite so." The young lady did not appear to be taken all of a heap by the reminder. "Yes; I am very glad of your papa's coming home, for your sake, dear Sydney."

"And I hope you are glad of it, too, for your own sake?"

"Indeed I am," Melissa answered, with a little more earnestness in her tone. "I know I shall like him very much."

"Like him! No; that's not enough. You must be very fond of him. You will be."

"I am sure I shall."

"Well, then, that is something remarkable; and I call it remarkable, too, that he should bring Miss Rowan along with him."

"That is perhaps a little remarkable," Melissa said demurely. "Do you think you shall like her?"

"Yes; I am sure I shall. She is very lovely, I believe, and full of enthusiasm about everything."

"Full of enthusiasm about everything! That must be rather trying and tiresome, mustn't it?"

"Not in her, Melissa, I believe ; not in her."

"She must be a regular charmer !"

"I believe she is."

"Who told you all this about her?" Melissa asked, with a slightly quickened interest in her manner.

"Papa, of course."

"Oh ! 'Papa, of course' ! Yes. Indeed? Does he greatly admire her?"

"Very much, I think. He has quite an affection for her, I am sure."

"Oh !"

There was silence for half a moment, and then Melissa looked up to her companion, and complacently said : "Perhaps he'll marry her?"

"Who, Melissa—marry whom?"

"Your papa—'papa, of course'—perhaps he'll marry this delightful Miss Rowan?"

Sydney frowned a little, and her lip quivered.

"You don't know papa, Melissa."

"But why, Sydney? Why shouldn't he marry her, if he is so fond of her? Of course one doesn't like having a stepmother, and all that ; but I suppose these sort of people are not so cruel now as they used to be ; and, besides, you admire her so much yourself. I should think it would be quite a delightful arrangement for all parties. I am sure there is something in it. You may depend upon it, Sydney, things will end that way."

Miss Marion was going at first to allow herself to be very angry ; but she thought it would be ridiculous to take any serious notice of such nonsense, and she was beginning to understand her friend's childlike delight in inflicting little punctures of annoyance every now and then. She did not allow herself to be angry, therefore, or even grave.

"You little silly goose," she said, "to talk that way of papa ! And I can assure you that I don't believe Miss Rowan is the girl to marry in such a way."

"But your papa is very nice, isn't he—clever, and all that? You always say so. 'And tall and handsome, isn't he? Why shouldn't she marry him?'"

"Stuff, Melissa !"

"I'll marry him if he asks me—fast enough," the little lady said, very composedly. "That would be something happening ! But I am sure he won't ask me."

"I am quite sure he won't," Sydney replied with emphasis.

"Yes?—I don't know. I think he might do worse. I should like immensely to be your stepmother. I should be awfully severe. Well, never mind; let us talk of something else. But first, one word about this Miss Rowan."

"You will see her soon, and then you can form an opinion of her for yourself."

"But it was about your opinion of her I wanted to know something. You never saw her?"

"Never."

"Yet you like her?"

"I know I shall like her very much."

"Because your papa likes her?"

"Quite so, Melissa."

"Then do tell me, are you really such an awfully good girl that you actually like people because your parents—I mean your father—likes them?"

"I don't know about being an awfully good girl; indeed, I know I am not an awfully good girl; but it does seem a reason for liking people if one's father likes them, does it not?"

"Oh, dear, no; quite the reverse, I should say. If papa and mamma like people very much, my natural impulse always is to dislike them. I thought that was every one's first impulse. How can one like anybody whom every one else is always praising—especially one's parents? If I hear them praise any other girl, I always take it as a reproach dealt sidelong to myself. It always seems to mean, 'Why are not you a dear, charming, delightful, virtuous angel like this? Why are you not the prop of your father's old age, and the joy of your mother's decaying years, like this blessed creature?' And then, of course, one naturally begins to hate the blessed creature, and to think what a great disagreeable impostor she must be."

Miss Marion made no comment on these words. They seemed to have set her thinking.

"Sydney, you haven't told me anything about your sister. You know I never saw her."

"You will soon see her too; I'll leave you to judge for yourself."

"Don't you like her?"

"My dear little Melissa, what a question!"

"No, but don't you? Don't you, really?"

"Like my sister? Of course I do."

"But you don't get on, perhaps?"

“ Well, we have not been much together this long time.”

“ I am sure there is something !” Melissa said triumphantly. “ I am so glad ! I like to hear of people who don’t get on and all that. They seem more like myself. I shall like you ever so much better if you quarrel with your sister ; and I shall like her if she quarrels with you. I shall devote myself to the task of making mischief between you. That might be something happening.”

“ What a dreadful little animal you would be,” Miss Marion said, “ if you were only a quarter as bad as you make yourself out ! But you can’t set any quarrel going between Katherine and me ; and I know you wouldn’t if you could. I almost wish you could, Melissa.”

“ Oh ! why ?” Melissa asked with eyes of beaming curiosity.

“ I am not sure that I quite know why ; and I am sure that if I did I wouldn’t tell you, you naughty little child.”

“ How disagreeable of you ! You won’t tell me anything.”

“ I think I have told you a great deal.”

“ Then, if I can’t set you two women quarrelling, I’ll tell you what I will do. I’ll start a flirtation with your sister’s husband, and make her awfully jealous ; that will be capital fun.”

Sydney only laughed at this resolve.

“ You’ll not be able to do that either,” she said.

“ Why not ?”

“ Well, for one thing, I think Mr. Trescoe isn’t given to flirtation. He is terribly shy ; Katherine does all the flirtation that is likely to go on there, I fancy.”

“ Then there will be all the more fun in drawing him out, won’t there ? I must be doing something, Sydney ; you are all going to be so awfully happy and fond of one another, and I shall be left out in the cold ; and if I am not to marry your papa, I really must get up a flirtation with your brother-in-law. Is he nice ? Is he handsome—is your sister the grey mare ? Oh ! I say, let us talk of something else. Here’s papa coming ; he will think me dreadfully silly.”

“ I don’t see how he could well think anything else,” said Sydney.

“ But I’ll not tell tales on you, if you will only promise to be more reasonable for the future.”

“ Indeed, I won’t promise anything of the kind ; I must do mischief of some sort, flirting or quarrelling, or something. How do you do, papa ? We have been talking about philosophy and the future life—Sydney and I.”

CHAPTER III.

"WHAT'S IN THE SHIP?—MY SHIPWRECK?"

MR. AQUITAINE came towards the girls. He looked like a young man when seen at a little distance, so straight, strong, and active was his frame. He was rapid and vigorous in his walk, and held his head up with a quick business-like air, the air of a man always ready. He was never slow or undecided in any of his movements; and he never seemed to be in a hurry. He had apparently contrived to combine the vivacity of his ancestral home with the solid composure of the country his people had adopted. He was smoking a cigar; he wore driving gloves, and had a camellia in his button-hole nearly as large as a star-fish.

"I'm going to show you everything while you are here, Miss Marion. We'll take a tremendous drive to-day to begin with; only you and Mel and I. My wife never goes out of the house. The only question is, what to begin at. What are your particular tastes in the way of towns and sight-seeing, Miss Marion? We have got all manner of things on exhibition: river-scenery, landscape, streets, docks, museums, what not. Are you interested in docks?"

"Dear papa, how could Sydney be interested in docks? What girl ever cared about docks? You might as well ask her if she felt interested in tobacco-warehouses."

"Well, there's a good deal to interest one in the tobacco-warehouses. I'll give her a look at them too."

"I like to see everything," Sydney said. "I love the great broad river because it is so new to me, and so unlike anything we have at home. But I think I should very much like to see your schools—the board-schools."

Melissa made a grimace expressive of the profoundest distaste for this branch of study.

"And I should like very much to go through the poorest quarters of the town; the streets where the low public-houses and beer-shops are, and the lanes and alleys, and such places."

"I am sure I don't want to see any such places," Miss Aquitaine declared, with a shudder at the mere thought of their existence. "What a strong-minded girl you are! I should never have thought it—with that fair hair too, and that complexion."

"Very good," Mr. Aquitaine said. "You are quite right, Miss Marion; I am glad to hear you have an interest in such things. I thought it was only up here in the North that women cared much for the condition of the poor, and the schools, and all that. You may

depend upon it, I'll take care that you see everything. But Mel won't come. She wouldn't take any interest ; and she is hardly strong enough ; it's a little beyond her."

This was quite enough to determine "Mel" on going.

"Then I am to be left behind to my own company?" she said, "while you two go exploring and seeing all manner of odd sights ! Excuse me, sir and madam, I'll go too. It will be delightful. Quite the Caliph Haroun Al-Raschid sort of thing. Look here, Sydney, I vote we dress in men's clothes."

"Some of mine," Mr. Aquitaine suggested. He was about five feet ten ; Melissa about five feet nothing.

"Anyhow, I'll go," his daughter insisted.

"All right, girl," her father said complacently. Suddenly remembering something, he turned to Miss Marion :—

"I forgot to say I had a letter from your father this morning, Miss Marion."

She gave an exclamation of eager delight.

"But it tells us nothing—I mean, nothing that you don't know already. It was written days and days before he left New York, and you know we have had telegrams from him since. We had one after he had actually left New York, sent back in the pilot-boat from Sandy Hook. So, of course, his letter tells us nothing so far as that is concerned ; we know he has sailed, and you may make your mind quite easy about him and his companions. They have splendid weather, and a good wind to help them along. They must be half-way across by this time."

"How soon shall we see him?" Sydney asked anxiously—and she asked only for *him*.

"Oh, well, in a very few days. We shall hear from them when they get to Queenstown. Don't you be anxious ; don't think about it at all. He'll be here before you know where you are ; before we have half done these schools. By the way, they have rather a remarkable fellow-passenger, he tells me."

Sydney did not seem to care much about the remarkable fellow-passenger. But Mr. Aquitaine liked instructing people about all manner of subjects, and having the first of everything. He was not going to let Miss Marion escape the remarkable fellow-passenger so easily.

"You have heard of Montana, Miss Marion, I am sure?"

"A place in America?" Miss Marion said a little doubtfully.

"Yes, there is a Montana in America, sure enough ; but it isn't that Montana that is coming over in the steamer."

Miss Marion shook her head: she did not know of any other

Montana. Mr. Aquitaine was glad, on the whole ; it gave him the more to tell.

“ Is Montana a man or a woman ? ” his daughter asked.

“ Montana is a man.”

“ Sounds more like a woman, doesn't it ? ” Melissa observed.

“ No ; it's a queer name, when one comes to think of it ; not an American name, certainly. But I don't suppose Montana is an American, except perhaps by birth ; I fancy he hails from somewhere in Europe. Anyhow, he is a very remarkable man, Miss Marion. They were talking a great deal about him when I was last in the States, but I never happened to see him.”

“ I thought every one was a remarkable man in America,” Melissa interposed.

Her father went on, addressing himself to Sydney, “ This is really a man out of the common—I have never heard *how* he began ; but he was a soldier in the war—the great civil war, you know ; and he left what they call a good record there, and now he is a lecturer, or preacher, or something of the kind, and the head of a great new school, and has what people call a mission of some sort. I have no doubt he is coming to Europe on some mission.”

“ He must be a tiresome old man,” Melissa observed in her genial way. “ I hate people with missions.”

“ It is interesting,” Miss Marion said after a moment. “ I wonder, will papa like him ? He doesn't generally like strangers.”

“ People are not strangers to each other on board an ocean steamer,” Mr. Aquitane said. “ Come, young ladies, get ready, and let us be moving ; we have a great deal to see.”

“ Ah, yes,” Melissa assented, with a sigh of anticipatory weariness. Sydney heard her, and was almost inclined to feel hurt. But Melissa smiled on her with such a pretty saucy smile of innocent infantile wilfulness that it was impossible to feel angry ; impossible not to laugh with the tormenting little creature. Sydney looked anxiously along the river before turning away ; it was still all sparkling and full of hope to see. If it had been dark, and the ripples had been ruffled ever so little more than when she first looked on it that morning, she might have taken it as an evil augury. But it still sparkled as if it had only to bear up vessels with youth at their prow and pleasure at their helm ; pretty dancing things made in the shape of sea-shells with silken sails, and little cupids playing at seamen, and nereids swimming all around and occasionally pushing the boat along in sport with their dripping shoulders. Sydney was not, in truth, so foolish as to be greatly alarmed about the dangers of the deep for people crossing the Atlantic in fine spring weather and in a great

steamer. But she had an anxious way about most things. She was commonly uneasy about her own people, about her father whom she loved, and her sister whom she tried to love. She was almost always thinking whether this or that would be agreeable to her father or not. If anybody were to mention anything in connection with her father's name, her first thought was one of anxious wonder as to whether her father would find himself pleased or not pleased. Now she was distressing her mind a little about the remarkable person coming over in the steamer with Captain Marion, and wondering whether her father would find the companionship an advantage or a nuisance on the voyage.

They saw a great many sights that day and for two or three days following. Mr. Aquitaine was determined to keep Sydney going incessantly, in order that she might not have too much time to think of her father on the sea. He took care that the girl should be very tired when she returned to dinner every day; and he had always a number of people to dine with them. He left her few moments for anxious meditation.

Mr. Aquitaine found that in all things, apart from her over-anxious ways about her father, he had a decidedly practical young woman to deal with in Sydney Marion. He was used to practical girls in the North, but he was under the impression that no such creatures came from the south. He had not faith in the practical work of man or woman below Birmingham, but he was especially inclined to put little faith in the business capacity of woman. In the North, indeed, there were so many practical and efficient women, that perhaps it made home life a pleasant variety to Mr. Aquitaine to have his wife and daughter so absolutely devoid of the practical element. Mrs. Aquitaine was still as ignorant of the working of English domestic, political, or social institutions, as if she had never been out of the Levantine region, and had never read a book or asked a question about England. Melissa did not know, and did not intend to know, anything about such dry subjects as laws and institutions. Mrs. Aquitaine could not have understood if she would; Melissa could have understood, but would not. Mr. Aquitaine was surprised to find how like a genuine Northern girl Sydney Marion was in many ways. She showed a deep interest in schools and workhouses and ventilation, and even rates and taxes. She wanted to know the averages of everything. She examined the little boys and girls at various board-schools, and praised some of those institutions and gravely shook her young head at others.

"Where did you get all this common sense, Miss Marion?" Mr. Aquitaine once bluntly asked. "I am sure your father hadn't much

of it ; and from what I saw of your sister Katherine I don't think she was richly endowed with it either."

Sydney could not, perhaps, have well explained. Yet the causes were not far to seek. She was three years older than her sister Katherine, and, when their mother died, she was left in charge of the household, being then only eighteen. She soon found that the household had been going to rack and ruin for a good long time before. Her mother was a sweet, bright, clever creature who always looked young, always kept young in face and in heart, was loved by every one, and let things go as they would. Captain Marion had been in the army for a short time, but had sold out when he got married, and settled down to enjoy domestic life, and to cultivate his literary tastes. He meant to write a book. He was still writing it. He had put most of his own money and his wife's into American railways, and for a long time it seemed as if he might as well have deposited it in the Atlantic. Sydney had some trouble to keep things straight for a while ; and not the least of her troubles was the effort to induce her younger sister to put up with any manner of little privation without too much grumbling. Katherine was very vain, and soon grew mightily fond of admiration, and could hardly endure a life of restriction and dulness. Now, however, the railway property was at last coming to be a genuine thing ; Captain Marion seemed likely to be a man of means again. He had gone out to the States to look after his affairs there, and to have the pleasant holiday of a successful man who combines business with pleasure and enjoys both.

Why did not Sydney go with him? Well, Sydney was a sort of pretty girl ; but somehow she was not attractive. There are fashions in beauty as capricious, and for their time as inexorable, as the fashions in dress. It is easy to believe in the satirist's account of what happened when the vision of Helen of Troy was conjured up to delight the eyes of a modern group of spectators. The ladies all declared that she was a mere fright and dowdy. It was not their jealousy ; the expression was doubtless quite sincere. Helen's beauty was not the reigning style, and to them it was the same thing as ugliness. Sydney Marion was by no means a Helen ; but her face might have been thought handsome in the days when oval faces and high foreheads were assumed to be the portion of every true heroine. But by the time she was able to come out in the living world and emerge a little from the almost cloister-like retirement of the cathedral town and her family difficulties, that style of beauty had passed utterly out of fashion. She ought to have a square-cut face and a long chin, and Nature had denied her these attractions. Her hair

ought to have come down in a fringe over her forehead, and it refused to do so of itself, and she would not use artificial means to coerce it. Her sister Katherine used to be thought rather a little fright in her school-days, because of her tiny turn-up nose, her sharp chin, and her unmanageable hair. Now she was regarded by every one as the beauty of the family. Sydney Marion's face was an anachronism ; and she was set down as old-fashioned. No doubt the fashion would change, and the oval faces and high foreheads might have their day again ; but Sydney Marion's youth would hardly wait for that revenge of time. She was already in her twenty-fifth year.

Perhaps the consciousness that her face was out of fashion helped to make her somewhat practical and opinionated. She seemed to most people a little hard. She kept her mind somewhat too well regulated. She could have fallen in love, and was longing to love some one ; but she had not as yet had a chance. She was wildly fond of her father and her mother ; and it always seemed to her that both preferred Katherine. She adored her father, and she felt sure that, with his equable temper and his love for philosophical justice, he must think her a better girl and more devoted daughter than Katherine ; and yet he seemed to enjoy Katherine's society more. A handsome young man used to visit them in their country obscurity, the eldest son of Sir Stephen Trescoe, a neighbouring landlord, and Sydney thought she could love him, felt herself drawn towards him, was sure she could confide in him, almost fancied he seemed to show some feeling with regard to her ; and he proposed for Katherine, and was accepted, and evidently believed he had carried off the most delightful woman in the world. There was some fear lest young Trescoe's stately and rich family might dislike a marriage with the daughter of a man who appeared to be poor ; but no sooner was Katherine seen by the lover's father and mother than they were captivated by her, and metaphorically clasped her to their bosoms. Sydney felt certain that if it had been she they would have been sure to object decidedly to the match. When the young married pair resolved to go with Captain Marion to the States, Sydney made some excuse for remaining behind, and her father, perhaps divining her feelings—he was very quick and sympathetic—fell in with her ideas, and she was left at home to wear her green stockings unseen. Now another alarm had sprung up in her mind ; a vague alarm, indeed, and with no reason that she could put into words. Captain Marion had met in the States the daughter of a dear old friend, Colonel Rowan, an Irish officer who had served with him during his short military career. Colonel Rowan was dead long ago, and his widow and daughter had gone out to the United States and taken up their

residence with Mrs. Rowan's sister. In some out-of-the-way town—or city, its inhabitants would proudly call it—Captain Marion sought them out, and so warmly renewed in them his friendship for Colonel Rowan, that the daughter was prevailed upon to come over to England with the returning party. Sydney heard of almost nothing but the beauty, the grace, the cleverness, the brightness, the accomplishments, the enthusiasm, the affection, the daughterly tenderness, the noble aspirations, and what not of this unique young lady. The whole party, Captain Marion, Katherine, Katherine's husband, seemed in a conspiracy to sound Miss Rowan's praises. Now an alarm arose in Sydney's heart. It was not of the nature that Melissa Aquitaine had kindly suggested. She had not the remotest idea that her father would marry the incomparable young Irish-American. But there was a young man who used to come to see the Aquitaines very often, a young barrister, who belonged to that part of the country, and came that circuit waiting for the time when he should have briefs ; and Sydney was a good deal taken with him, he seemed so straightforward and manly and intelligent ; and he seemed to like her. He was evidently not in love with Melissa, and Melissa did not care about him. He had known her since she was a child ; he used to call her "Mel," and chaff her, and be saucily chaffed by her, and it was clearly impossible that such two could ever be in love. Sydney had sometimes, in the most secret recesses of her heart, imagined that he looked at her with eyes of kindly emotion. And now, behold ! she is threatened with the invasion of a distractingly delightful and wonderful girl, and it is certain that the moment young Mr. Fanshawe sees Miss Rowan he will fall straightway in love with her. Sydney could not even have the luxury of hating the supposed rival. She was unfortunately too just in mind for that. She was too like her father. She knew it. She knew that if Miss Rowan really turned out worthy of regard, she could never help liking her, even though the girl were to come between her and her dearest hopes. For the moment Sydney was vexed with herself for her absurdly critical and judicial nature, and wished she could hate people for nothing, as Katherine would do, and feel no scruples of conscience. She was accustomed to think a good deal and to study her own mind, and, without any egotism, she knew herself and her own weaknesses pretty well, and she knew that she had a nervous kind of foible for justice, something akin to a physical nervousness, which she could not get over, and which would make her impotent to hate even her enemies—if she had any enemies—and they were not wholly in the wrong. She looked forward with a sinking heart to the coming of this odiously bewitching and cruelly

admirable stranger—and Miss Rowan was to go with them to London ; to stay a long time with them there ; and young Fanshawe lived in London.

“ Come, Miss Marion—come, Mel,” Mr. Aquitaine exclaimed one morning. “ No time to lose ; the *Transatlantic* is signalled. We shall only have time to drive down and get on board the tender.”

“ The *Transatlantic*—to-day ? ” Sydney exclaimed, turning pale, and trembling with delight and with the nervous alarm which even delight brings to sensitive and anxious persons.

“ Just so. I didn’t tell you she was expected so soon. I didn’t want you to be exciting yourself before there was any occasion, and counting the moments.”

Mr. Aquitaine’s shrewd mind had long since seen into the temper and nature of Sydney Marion.

“ Now then, young women, get ready. I’ll rattle you down in rather considerably less than no time. My horses can go like those of Mephistopheles.”

“ Perhaps you won’t care to go, Melissa ? ” Sydney said, turning to Miss Aquitaine, and putting a kindly hand on her shoulder. She did not want Melissa to be tired and bored about people who were not Melissa’s father and sister. Perhaps, too, Sydney thought she could be more free to indulge in all her own feelings without the girl.

“ Indeed I’ll go,” Melissa promptly answered. “ What an unkind creature you are, Sydney ! You know I am longing to see Miss Rowan and Mr. Trescoe, and you know I am only too glad to go in the way of anything out of the regular routine. I want something to happen ; not that I think anything will happen to-day.”

“ One thing will happen, I can assure you,” her father said. “ We shall be late if you don’t be quick ; and I know what Captain Marion will feel if he doesn’t see his daughter there to meet him.”

They were soon on their way.

Sydney Marion’s heart beat strongly as the tender approached the great steamer. She kept straining her eyes anxiously for her father’s figure long before she could distinguish one form from another. As they drew nearer and nearer she still could not see him. Now she could plainly see the figure of a tall man who was leaning over the side of the steamer, and looking evidently in the direction of the tender. That must surely be her father. Her eyes were sparkling with anxiety. She was now almost near enough to see his face ; it did not seem like the outline of her father’s. Nearer and nearer still ; and now, gazing anxiously up, her eyes are met by those of a stranger. His eyes look straight into hers, and she looks down in disappointment and with a nameless sensation of

discomfort. The man she has seen is handsome ; even in that short moment she observed that he had intensely dark hair, and eyes of an almost oppressive brilliancy. Then suddenly she sees that Captain Marion is just behind or beside this man, and she is vexed that any face should have come between her and her father's. She sees her sister and her husband and a girl whom she assumes, of course, to be Miss Rowan. She is hurried up the ladder and on to the deck of the steamer, and her father catches her in his arms.

Meanwhile, Miss Melissa was not particularly anxious about the whole expedition. She was not greatly absorbed in longing to meet Sydney's father ; she felt a little interest about the probable appearance of Sydney's sister, and still more about Miss Rowan. She allowed herself to be guided and helped and lifted on to the steamer's deck in a dreamy sort of mood, thinking about hardly anything except the discomfort of steamers in general and the annoyance of having friends who had relations coming from America. In the eagerness of all the others of her party, each hurrying forward to meet somebody or see somebody, little Melissa found herself almost isolated for a moment. Every one appeared to have forgotten her—a condition of things which was new to her, and which, however short its lasting, was not at all agreeable. She hardly knew where she was going, when suddenly her feet caught in a rope. She staggered and floundered a little, and she might perhaps have fallen but for the promptness of a man who stepped forward just at the right time, and caught her and lifted her safely over the danger. In her odd little languid way she closed her eyes when she found herself slipping, and hardly opened them quite until she knew she was firmly and safely on her feet again. There was something strong, gentle, and fatherly in the touch of the hand which held her up, and she thought perhaps it was Sydney's father, and was inclined to make a pretty little filial sort of scene. But opening her eyes, she saw two intensely deep, brilliant eyes looking into hers, and saw that a very tall dark man was her supporter. She quailed under those strange eyes. She felt herself growing red and tremulous. She looked up to him again ; their eyes met again. He must have seen that hers sank under his look.

But his face showed not the slightest gleam of interest in her. He had not spoken a word as he was helping her out of her little difficulty ; he appeared to take no more interest in her than he would have done in a fallen chair which he happened to lift up. The moment she was safely on her feet he drew aside without bowing or uttering a word. Melissa tried to say something in the way of thanks, but she

could not find speech ; and it did not seem as if he was listening for her to speak. He had clearly not given a thought to her. When she was a child she had once taken hold of the handles of an electric battery, and she received a shock of pain that thrilled all through her ; and she could not get her hands away, and she could not cry out. Melissa now recalled in a strange, sudden way that long-forgotten sensation, and seemed to feel it once again.

In a moment, however, she is in the centre of the group of greeting friends, and has to make several new acquaintances all at once. The man with the dark eyes is one of them. He is the only one of whose presence she is distinctly conscious. He is first introduced to her father, and then her father presents him to Melissa, and Melissa finds that he is the Mr. Montana, the remarkable fellow-passenger. He does not appear to remember or to know that he has just given her a helping hand. She can only stammer out a wretched unmeaning little word or two, and then somebody else is there. She scarcely knows one from another : she hardly even notices Miss Rowan.

Sydney Marion, too, goes through a series of bewildering experiences. She had hardly been released from the loving embrace of her father when her sister greeted her with a playful pull at her hair. Her brother-in-law gave her a kindly kiss, which would have been much less embarrassing if he had not hesitated, as if he did not quite know whether he ought to kiss her or not, and then she found herself making the acquaintance almost in a breath of her father's new friends, Miss Rowan and Mr. Montana.

Thought formed and reformed itself in a moment within her mind. "She is very lovely; no, I don't think she is; she is too thin; she has no manner ; no, she has too much manner ; oh, yes, she is very charming. But what an extraordinary man ! Is he very handsome, or is he very ugly ? He looks like a prophet. He looks like Monte Cristo. Was he buried alive and dug up again ?"

She found herself close to Melissa as they were all preparing to get on board the tender. Melissa looked shaken or affrighted or something of the kind ; as if she had fallen and hurt herself, Sydney at first imagined.

"Has anything happened ?" she asked in a low voice, and putting her arm round the girl.

"No, nothing," Melissa answered distractedly. Then looking up, and with her old manner, she added, "Oh, no ; what could happen ? I always told you nothing ever happens."

(To be continued.)

THE FIFTEEN PUZZLE.

TAKING up, the other day, in a Tasmanian hotel, a copy of a Sydney weekly newspaper, I came across an extract from the *Illustrated London News*—a passage in which Mr. Sala comments humorously on the now celebrated, or perhaps one should rather say the now notorious, Fifteen Puzzle. He therein suggests that a short Act of Parliament should be passed “prohibiting, under penalty of heavy fine and long imprisonment, all and sundry of her Majesty’s subjects from playing a dreadful game called ‘Fifteen,’ and known in the United States as the ‘Great Boss Puzzle.’” “You have ‘a box,” he says, “containing sixteen numbered blocks or counters. You take out the number ‘16’; you mix up the counters in the box so that they will run irregularly; and then your task—your fearful task—is, without lifting the tablets from the box, to push them horizontally into a regular sequence of from 1 to 15.” (The description is not quite correct, by-the-by; however, every one knows what the puzzle really is, and a scientifically exact account of it is not required in a humorous description.) “‘That way madness lies,’” proceeds Sala; “but, pshaw! what need have I to describe the fearsome game? Even as I write, thousands of my readers, old and young, may be playing it. If time be indeed money, that Great Boss Puzzle must have cost me at least a thousand dollars between January and June last. I played it at Omaha; I played it at Chicago; I played it at Great Salt Lake City; I played it on board the *Hecla* coming home; and, upon my word, so soon as I have finished writing the ‘Echoes,’ I shall be at the Great Boss Puzzle again. Why was it not stopped at the Custom House? Why was it not brought under the provisions of dangerous explosives or cattle-plague laws? There would be no use in proceeding against the persons who have naturalised this appalling apparatus in England. Our old friend, ‘the merest schoolboy,’ can make a game of Fifteen for himself from so many buttons or draught-counters. It is the players who, in the interests of precious time, should be punished.”

I myself took some part, sad to say, in naturalising the fearsome in England. For about the time when the Boss Puzzle was

—I would say, most mischievous—in America, I sent a notice to *Newcastle Weekly Chronicle*. I accompanied that

description, however, with a statement that the problem can be proved to be soluble in certain positions, and insoluble in others. In fact, from any one of more than ten million positions the problem can be solved, while from precisely the same number of positions it cannot. Unfortunately, I went on to say that if any one were to assert that he had brought the blocks to their right position from one of the positions of the insoluble class, or had seen the feat achieved, he must either be mistaken or else tell an untruth. This remark, perfectly true and altogether innocent of offence, seeing that I knew of no readers of the *Newcastle Weekly Chronicle* who had asserted or were prepared to assert any such thing, excited the wrath of many who, as they doubtless supposed, had succeeded in solving the problem in all possible positions.

As the proof referred to in the *Newcastle Weekly Chronicle*—as far back, I think, as last March (I wrote my remarks on the puzzle at Chicago last February)—is exceedingly simple, and may prevent many (or theoretically should certainly prevent all) from wasting their time over insoluble positions of the Fifteen Puzzle, I think many readers of the *Gentleman's Magazine* may be interested if I indicate briefly and simply how the demonstration runs. It occurred to me a few hours after I had seen the puzzle, and seems so simple and obvious, that I can scarcely imagine how others have failed to notice it. Yet it has not, to my knowledge, been given elsewhere. Moreover, I have seen several attempts to analyse the puzzle, some by mathematicians of repute and even of eminence, in which incorrect reasons have been assigned for the insolubility of the problem from certain positions, and incorrect rules laid down for distinguishing soluble from insoluble positions. The rule resulting from the following analysis is, I believe, the only correct one, though it is quite possible there may be others, apparently independent, which are, however, in reality deducible from it.

First, let us consider what the puzzle really is, because it has been through mistaken ideas on this point that many have been led to suppose they had solved the problem from insoluble positions, when, in reality, they had done nothing of the kind.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	

FIG. 1.

We have a square box containing sixteen square blocks, numbered in order from 1 to 16. The sixteenth block is removed, so that the position of the blocks is that shown in Fig. 1. This is called the *won position*, viz. that in which the blocks read in succession, as we read printed matter (that is, each line from left to right, and line after line in numerical order), run in the order of the numbers from 1 to 15, the vacant square being on the fourth or last line.

The blocks are next arranged in any random order (which must not be done *solely* by shifting the blocks one by one from the won position without taking any out). The problem is then to bring the numbers into the "won position" without removing any, that is, by simply shifting them one by one into places successively vacated. It is to be noted that the "won position" must be obtained precisely as pictured in Fig. 1, or as defined above. Many seem to imagine that the problem is solved if either such a position as that shown in Fig. 2 or that shown in Fig. 3 is attained. But this is not the

	1	2	3
4	5	6	7
8	9	10	11
12	13	14	15

FIG. 2.

case. In fact, both these positions belong to the insoluble class. They not only are not won positions, but the true won position cannot possibly be obtained from either of them. It ought, perhaps, to be unnecessary

4	8	12	
3	7	11	15
2	6	10	14
1	5	9	13

FIG. 3.

to add that the problem cannot be fairly solved by taking the 6 and 9 and replacing them each in their own space, but inverted so that they read as 9 and 6 respectively (a change which also alters a position from the insoluble to the soluble class, and *vice versa*); but, as some seem to imagine the change permissible, it may be as well to mention that it is not. *In fine, the problem is, from any random position of the fifteen numbers to obtain the precise position shown in Fig. 1 without removing any one of the blocks otherwise than sliding it into a neighbouring vacant square.*

Before proceeding to discuss the puzzle, it may be well to inquire whether time given to such matters is not altogether wasted. I believe that any problems requiring for their solution the exercise of patience and ingenuity serve a useful purpose; but it must be admitted that some are much less useful than others, while some require so much time, and call into action faculties of such small value, that their use as exercises in patience affords but a small compensation for the time devoted to them. Nine-tenths of the puzzles, charades, rebuses, acrostics, and so forth, in periodical literature, are unfortunately of this kind. But problems like the Fifteen Puzzle, Chinese puzzles, and others, serve as a means of mental training almost as well as problems in mathematics. That is, they do so if dealt with in the right way. For there is a right way and a wrong way, even in dealing with the simplest puzzles. The wrong way is to set to work in haphazard fashion, trusting to the chapter of accidents for the solution. The right way is to reason the matter out step by step, proceeding from the known to the unknown in the simplest

puzzle, precisely as the student of science strives to pass from the known to the unknown in dealing with some great problem of nature.

Now, suppose we examine first the won position ; passing from it to others, by simply shifting the blocks in the manner allowed when dealing with any ordinary or random presentation of the puzzle. It is clear that any position attained by shifting the blocks thus from the places shown in Fig. 1 *must* be a winning position, since we have only to retrace the steps by which such a position has been obtained to come again into the won position.

We can push block 15 to the vacant corner square, and 14 next to 15, and 13 next to 14. By these changes we do not alter the sequence of the numbers, reading them in the same way as we read printed matter. Nor do we alter the number of the row on which the vacant square lies, counting the horizontal lines as we count the lines of printed matter. We alter only the position of the vacant square in its horizontal line, or the position of the *column* containing the vacant square. But we begin already to see that this change is of far less importance than a change in the number of the *line* containing the vacant square. For the numerical sequence, the arrangement of which is the main aim of any movements for solving the problem from a random position, is not affected at all by shifting a block horizontally.

Replace the shifted blocks as at first, and try the effect of vertically shifting them.

Bring block 12 to the vacant square. By this change *three* blocks, viz. 13, 14, and 15, are thrown out of their proper position ; all the rest, from 1 to 11, should precede 12, and do so ; but these three which now follow should precede 12. There are then *three* displacements, and the vacant square has been shifted from the fourth to the *third line*. Push down next the 8 block. Then there are *six* displacements (9, 10, 11 preceding instead of following 8, and 13, 14, 15 preceding instead of following 12). The vacant square has been shifted to the *second line*. Shifting down the 4 block, there are *nine* displacements, and the vacant square has been shifted to the *first line*. In all three cases, the vacant square is in the fourth column.

Push back the shifted blocks, resuming the won position ; and, having shifted 15 to the corner square, push down successively 11, 7, and 3.

When 11 is pushed down, there are *three* displacements (12, 13, and 14 preceding instead of following 11), and the vacant square is on the *third line* ; when 7 is pushed down there are *six* displacements, and the vacant square is on the *second line* ; and, lastly, when 3 is pushed down there are *nine* displacements, and the vacant square is

on the *first* line. In all three cases the vacant square is in the *third* column.

These results are the same as when the blocks 12, 8, and 4 were pushed successively down in the fourth column; and we get the same results if, after resuming the won position, we push both 14 and 15 to the right, bringing the vacant square to the second column, and then push successively 10, 6, and 2 down; or if we push 13, 14, and 15 down, bringing the vacant square to the first column, and then push down successively 9, 5, and 1.

Let us now arrange the twelve cases just considered, and inquire if any law begins to appear among these twelve winning positions. The cases run thus :—

Case	No. of Displacements	No. of Vacant Line	No. of Vacant Column
1st	3	3	4
2nd	6	2	4
3rd	9	1	4
4th	3	3	3
5th	6	2	3
6th	9	1	3
7th	3	3	2
8th	6	2	2
9th	9	1	2
10th	3	3	1
11th	6	2	1
12th	9	1	1

It is obvious from this table that if we are seeking in the right direction for some law by which to distinguish winning positions from losing ones, assuming (as at this stage of the inquiry we can but do) that such a law exists, we need pay no further attention to the number of the column on which lies the vacant square. We see that when the number of displacements is even, the number of the partially vacant line is also even; while where the number of the displacements is odd, the number of the partially vacant line is also odd; but the number of the partially vacant column varies from odd to even, and from even to odd, independently of any change in the other tabulated relations.

To make one further trial of known winning positions before ex-

1	2	3	4
5	6	7	8
9	10	15	11
13	14		12

FIG. 4.

amining a random position, push down the 12, 11 to the right, and then 15 up, getting the position shown in Fig. 4. Here there are *six* displacements, 15 coming before 11, 13, 14, and 12, instead of coming after those four numbers, and 13 and 14 each coming before instead of after 12. The vacant square is on the *fourth* line.

Thus the number of displacements and the number of the partially vacant line are both even. Bring down the 15

again (I take no special notice of the position thus attained, because it is the same as case 1 of the above table, except as to the number of the partially vacant column, which we have seen to have no significance whatever). Push

down the 7 into the vacant square, getting the position of Fig. 5. In this position there are *six* displacements (8, 9, 10 before 7, and 13, 14, 15 before 12), and the vacant square is on the *second* row ; or, again, the law that the number of displacements and the number of the partially vacant

1	2	3	4
5	6		8
9	10	7	11
13	14	15	12

FIG. 5.

line are either both even or both odd is fulfilled. So also it is fulfilled if from the position of Fig. 5 we push down the 3 ; for then it will be found that there are *nine* discrepancies, while the partially vacant line is the *first*.

This, then, seems likely enough to be a law for *all* winning positions : that the total number of discrepancies as regards numerical sequence, and the number of the partially vacant line, are either both even or both odd.

I might, indeed, go on in this way—that is, starting from the won position—and establish the law just indicated without further ado. But I prefer to attack the puzzle now from the other end—that is, starting from a random position—taking the hint thus obtained for our guidance. I do this, first, because it was in this way that I actually analysed the Fifteen Puzzle ; and, secondly, because I believe that *nón*-mathematical readers will find their *aperçu* of the subject clearer after a second review of the primary considerations on which the analysis depends.

I take, then, the random position shown in Fig. 6, already employed in analysing the Fifteen Puzzle for the *Australasian*, to which weekly journal I sent an account of the puzzle early in the year 1880.

Guided by what we have already seen, we first count the number of discrepancies in the arrangement of Fig. 6.

(For convenience, I shall hereafter call the number of discrepancies in any given case the “total discrepancy” ; and instead of saying the number of the partially vacant line is odd or even, as the case may be, I shall say simply the vacant line is odd or even.) We may count the discrepancies thus, our examination running along the numbers in the order of the lines, as in reading :—

■	14	12	4
5	■		■
3	7	15	2
13	10	6	11

FIG. 6.

				Discrepanci
12	which follows	should precede	14.....	1
4	„	„	9, 14, 12	3
5	„	„	9, 14, 12	3
1	„	„	9, 14, 12, 4, 5	5
8	„	„	9, 14, 12	3
3	„	„	9, 14, 12, 4, 5, 8	6
7	„	„	9, 14, 12, 8.....	4
2	„	„	9, 14, 12, 4, 5, 8, 3, 7, 15	9
13	„	„	14, 15	2
10	„	„	14, 12, 15, 13.....	4
6	„	„	9, 14, 12, 8, 7, 15, 13, 10	8
11	„	„	14, 12, 15, 13.....	4
Total discrepancy				52

Thus the total discrepancy is *even*, and the vacant line is also *even* ; so that, if our suggested law is correct, the position should be a winning one.

Let us now consider the effect of any change in the position of the blocks from the arrangement shown in Fig. 6. What we want to ascertain is whether, when any such change has been made, by sliding without removing blocks, the position retains the characteristics which we have been led to regard as indicative of a winning position.

It is clear that, whether we push the 1 or the 8 into the vacant place, the “total discrepancy” remains unchanged. If, however, we shift the 12 to the vacant position, the total discrepancy is altered ; for the numbers 4, 5, and 1, which should precede 12, but did not in the original position, are now made to do so. The “total discrepancy” is reduced from 52 to 49, the vacant line from the second to the first. Thus, the law we are inquiring into still seems to hold good, for now both the total discrepancy and the vacant line are odd. So also it holds if, instead of pushing down the 12, we push up the 15. For in this case the numbers 3, 7, and 8, which should precede 15, and did precede 15 in the original position, are made to follow 15, the “total discrepancy” being thus increased from 52, an even number, to 55, an *odd* number, while the vacant line is also changed from even to *odd*. In all the cases thus far considered the total discrepancy has either been increased or diminished by three, when a block has been pushed up or down. But if after pushing 15 (Fig. 6) up, we push 6 up, we only change the discrepancy (55) by *one* ; for 6, which had followed and should follow 2, is made to precede 2, increasing the total discrepancy by one, while 13 and 10, which had not followed 6 as they should, are made to do so, decreasing the total discrepancy by two, the actual reduction being therefore only *one*. Thus, after this change the total

discrepancy is 54, an *even* number ; the vacant line is the fourth, or also *even* ; and the law we are considering seems to be fulfilled after this change as after the others.

But we begin now to see that *every* vertical displacement of one block must increase or diminish the total discrepancy, either by the odd number *three* or by the odd number *one*. An upward displacement puts a number before three others which had been after those numbers. Now, either the displaced number is greater than all those three or greater than two of them, and less than one, or greater than one of them only and less than two, or less than all three of them. In the first case, the total discrepancy is increased by *three* ; in the second, it is increased by two and reduced by one, or increased on the whole by *one* ; in the third it is increased by one and reduced by two, or reduced on the whole by *one* ; in the fourth case, the total discrepancy is reduced by *three*. And obviously, pushing down a block must exactly reverse these effects in the respective cases considered ; either reducing the total discrepancy by *three* or by *one*, or increasing it by *one* or by *three*.

Since, then, each vertical change increases or diminishes the total discrepancy by an odd number (3 or 1), successive changes of this sort cause the total discrepancy to be alternately odd and even. They also, of course, cause the vacant line to be alternately odd or even. So that, if the total discrepancy and the vacant line are both odd or both even for any given position, they are both even or both odd after a vertical displacement, both odd or both even after the next vertical displacement, both even or both odd after the next ; and so on continually, that is (since horizontal displacements produce no change at all in them), they remain always alike, both even or both odd, whatever changes are made. On the other hand, it is equally clear that if for any given position the "total discrepancy" is odd and the vacant line even, the former will be even and the latter odd after a vertical displacement ; one odd, the other even, after the next vertical displacement ; and so on continually ; that is (since horizontal displacements produce no change at all in them), they remain always unlike—one odd, the other even—whatever changes are made.

Since, then, in the won position the total discrepancy (0) is even, and the vacant line (4th) is also even, in every position deducible from the won position or reducible to the won position, the total discrepancy and the vacant line are either both even or both odd. And therefore no position in which the total discrepancy is even and the vacant line odd, or *vice versa*, can possibly be a winning position.

1	2	3	4
5	6	7	8
9	10	11	12
13	15	14	

FIG. 7.

We have established a law which at any rate proves the hopelessness of attempting to pass from the position shown in Fig. 7, or from any position deducible from or reducible to this arrangement, to the won position shown in Fig. 1. For in Fig. 7, the discrepancy is *one* or odd, and the vacant line even. This, with many, will be regarded as a sufficient analysis of the Fifteen Puzzle, since every one who has ever tried it knows well that we can always reduce any given position in a few minutes, either to the position shown in Fig. 1 (the won position), or to that shown in Fig. 7, which may conveniently be called the lost position.

But in reality something more is required for the complete analysis of the puzzle. We have proved that from none of the multitudinous positions (one-half of the total number) in which the total discrepancy is odd and the vacant line even, or *vice versa*, can any position be obtained in which the total discrepancy and the vacant line are either both even or both odd; also, that from not one of the multitudinous positions of the latter kind (say the *winning* kind) can one of the former kind (say the *losing* kind) be obtained. But we have not yet proved that from any position of the winning sort any other position of the winning sort, including the won position, can be obtained; or from any position of the losing sort any other position of the same sort, including the lost position.

We cannot possibly prove either of these relations experimentally, for the simple reason that there are more than ten millions of millions of positions of the winning sort, and as many of the losing sort.¹

¹ There are in each position fifteen occupied squares and one square unoccupied, which square we may always suppose to be occupied by the number 16. The total possible number of arrangements, therefore, is the same as the number of permutations of 16 things (all appearing in each arrangement, which is, indeed, understood usually by mathematicians when they use the word permutation as distinguished from combination). This number, it is well known, is that obtained by multiplying together the numbers 1, 2, 3, 4, &c., up to 16, or 20,922,789,888,000. Of these, one-half, or 10,461,394,944,000, are winning and as many are losing positions.

I venture to quote here, in passing, some remarks which I made in my article on the Fifteen Puzzle in the *Australasian*—remarks not, of course, intended to be taken *au grand sérieux*, but which were unfortunately so taken by a few whom I must consider rather dull-brained readers. “Professor Piazzì Smythe, and other believers in the Great Pyramid, may find in the above numbers proof positive that the architects of that building at once anticipated the celebrity of the Great Boss Puzzle, and were acquainted with the distance of the star Alpha Centauri, the nearest of all the stars. The proof runs thus: The base of the pyramid is square, like the Fifteen Puzzle box, and has four sides, suggesting manifestly the

Yet it is not difficult to prove that from any winning position any other winning position, and from any losing any other losing position, may be obtained. The demonstration may be arranged as follows :—

When we take a square of four small squares only, and have three numbered blocks (say 1, 2, 3) and one vacant square, we can shift these round from any given position into twelve positions, as thus :—

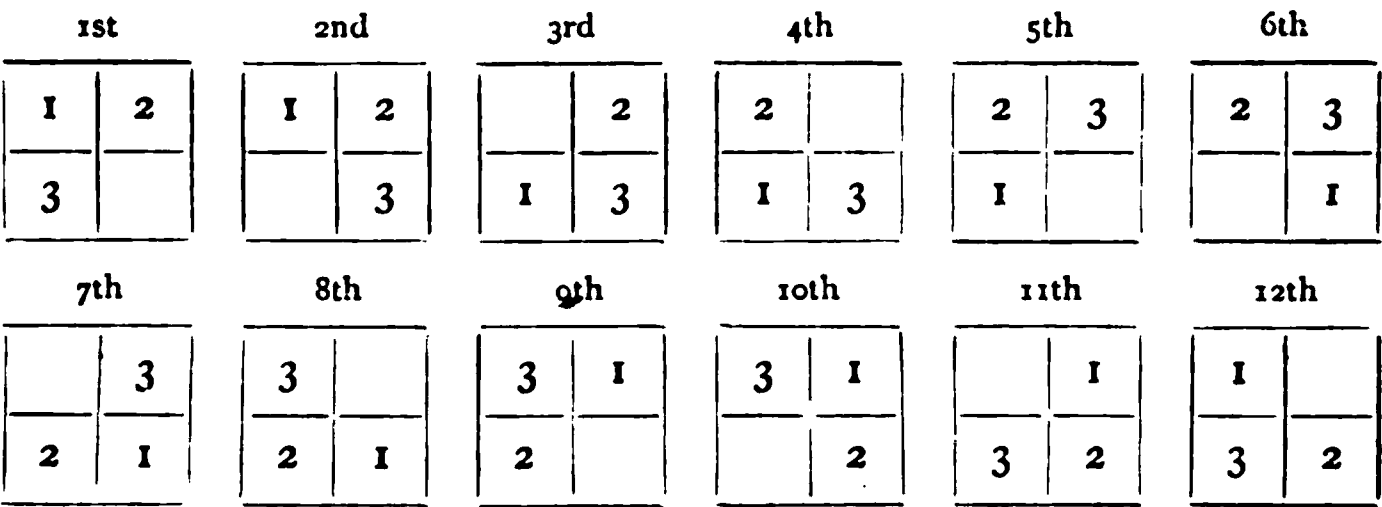


FIG. 8.

These are only half the possible positions of the numbers 1, 2, 3, in a square of four quarter-squares. The other half will be obtained by starting from the position

1	3
2	

 and carrying the vacant square round in the way above shown, for the series of 12 positions from the initial position

1	2
3	

In this, the simplest case, we see that starting from any given position, half the possible arrangements of three numbers in a vacant square can be obtained, and half only ; but if the sequence of the numbers (going round the square) be altered from 1, 2, 3 to 1, 3, 2, or *vice versâ*,¹ all the remaining positions can be obtained. Hence we have further evidence of supernaturally imparted knowledge. *Quod erat demonstrandum.*"

¹ There are only two possible arrangements, 1, 2, 3, 1, 2, 3, 1, 2, 3, &c., and 1, 3, 2, 1, 3, 2, 1, 3, 2, &c., so far as sequence round the square is concerned. Further, in each arrangement the numbers run in numerical order, either in one direction or in another. It was from failing to notice this law in the sequence of three numbers that Humboldt was led to imagine that there is some significance in the circumstance that the three promontories terminating the continents of America, Africa, and Australia, in the southern seas, approach successively nearer to the South Pole. As there are only three, they could not but do so, either as we take them in order from east to west, or else as we take them in order from west to east. The point is considered more at length in my essay on equal-surface projections of the globe in "Essays on Astronomy."

be obtained. The movements by which such positions are obtained may be regarded as a turning movement around the central point of the square ; and in this case there is but one point around which such turning movement can be made. Moreover, notice that it matters nothing which way the turning takes place. The successive positions shown in Fig. 8 form a complete re-entering series, and according as we consider this series in the order there shown, or in the reverse order, the turning is supposed to have taken place in the same direction as the hands of a watch or in the reverse direction.

Now, it is to be noticed that in the complete puzzle, or in a similar puzzle with a smaller or greater number of rectangles (as a 9 square, or a 25 square, or a 3 by 4 rectangle, or a 5 by 6 rectangle, and so forth), every point of intersection of the cross lines forming the squares is a centre round which, by bringing the vacant square next to any such point, the three blocks left around it can be turned, as in the above case we turned the numbers 1, 2, 3. But we can also turn the numbers round any *line* between such points of intersection. Thus, in the won position of Fig. 1, the blocks 15, 14, 10, 11, 12, can be turned round the line between the blocks 11 and 15, retaining the same sequence round the rectangle of six squares in which these blocks and the vacant square lie ; and similarly with any other such line between two squares. Again, the blocks 15, 14, 13, 9, 10, 11, and 12 in the same figure can be turned round the line between the blocks 14, 11, and 14, 15. Next, the blocks round any one of the middle squares can be moved round such squares (after the vacant square has been brought next to it). Thus the blocks 15, 14, 10, 6, 7, 8, and 12, Fig. 1, can be moved round the block 11. So the blocks round any adjacent pair of the blocks now occupied by the number, 6, 7, 10, and 11, in Fig. 1, can be turned round that pair (as, 12, 8, 7, 6, 5, 9, 13, 14, 15 round the pair 10, 11). And lastly, the border squares can be turned round the central set of four squares occupied in Fig. 1 by the numbers 6, 7, 10, 11.

In all, in the complete puzzle, there are thirty-six kinds of turning motion, namely : round nine points of intersection, round twelve lines between squares, round six lines between pairs of squares, round four squares, round four pairs of squares, and round one square of four square.

In what follows, I propose, for convenience of description and explanation, to regard rotations such as are above described as always taking place in one direction, viz. in the direction contrary to that in which the hands of a watch move (this being what mathematicians call the positive direction of rotation) ; and when I speak of rotation round a rectangle or square of blocks, whether the whole set or part of a set shown in a figure, I mean that the border

squares in that rectangle are to be rotated round ; also when I speak of rotation by so many squares I mean that the vacant square is to be carried round in the forward direction of rotation so many squares. At first sight it might appear, in studying Fig. 8, that the vacant square was carried the other way round—and, indeed, this is the case if we consider the blocks as moved separately. But in what follows we suppose, unless the contrary is specified, that the set of blocks to be rotated are carried round together. For instance, we consider there has been a rotation of one square in moving from position 1 to position 4, of another square in moving to position 7, of another in moving to position 10, and of a fourth in moving onwards to the original position 1.

So much premised, I proceed to show, step by step, that in rectangles and squares six, eight, nine, twelve, and finally of sixteen blocks, we can always pass from any position to another of the same kind.

In Fig. 9 we have the won position for five blocks in a six-block rectangle. Let it be required to get any three

A		
1	2	3
4	5	
C		B

FIG. 9.

blocks in given order in the upper row, which is “equivalent” to getting any given or possible arrangement of the five blocks. The two blocks which are to be where 2 and 3 are now must either be next to each other (in order of sequence round the rectangle) or not. If they are not, bring the one which is to occupy square 3 to that square by rotating round rectangle A B, then the corner vacant in figure will be occupied by some other block than the one required to be in square 2. Rotate round A C till this block comes to square 2. Now bring these two squares by rotation round A B to the right-hand column ; and rotate the other round A C till the one which is to be in square 1 is in square 2. Then a forward rotation by one square round A B brings the three numbers into the required position. If the two numbers to occupy squares 2 and 3 were originally adjacent and in wrong order, we must separate them by rotating round A B till either the top or bottom row are occupied by the two numbers and a vacant square between them, into which vacant square we put the middle block of the bottom or top row, as the case may be. After this the above method can be applied.

So that in every case the top row, or any three squares in sequence round A B, may be occupied by any three blocks we please in any order.

We cannot do more than this, for only two blocks remain, and it may be shown for such a rectangle as A B, precisely as for the original puzzle, that one-half the possible arrangements, though interchangeable *inter se*, are not interchangeable with arrangements belonging to the other half.¹

¹ The total discrepancy and the vacant line in all positions reducible to that

Next take the case of a rectangle of eight squares, as A B, Fig. 10, where the won position for such a rectangle is shown. What we have to do in this case is to get a given set of five blocks, in assigned order, into the squares 1, 2, 3, 4, and 5. First, as in the last case, we get the two blocks which are to occupy the squares 3 and 4 into these

A	C			
	1	2	3	4
	5	6	7	
	D			B

FIG. 10.

squares, and, by rotating backwards round C B, we bring them into the right-hand column. The remaining blocks of the five belong to the last case, since they are in a rectangle (A D) of six squares. We bring them into proper sequence, but in the squares 1, 2, 3 (instead of 5, 1, 2, which they are eventually to occupy). Then all the five blocks are in proper sequence, and a rotation of one square round A B brings them into the proper squares 1, 2, 3, 4, 5.

Next take a square of nine squares, as A B, where the won position for such a square is shown. What we have to show in this case is that a given set of six blocks can be brought, in a given order, into the squares 1, 2, 3, 4, 5 and 6. Now, of the blocks to occupy squares 1, 2, 3, two, at least, must be in one or other of the rectangles C B, D B. According as two such are in C B or B D, bring them to position 2, 3, or 4, 7, in their right order of

A	C		
	1	2	3
D	4	5	6
	7	8	
	F		B
			E

FIG. 11.

sequence as around A B. In each case, shift them by rotating round 5 to the position 3, 6, and the vacant square to the corner B. Then, if the third block is at 2, 5, or 8, the case belongs to that first dealt with, the three blocks to be placed being in a rectangle (C B) of six squares, one vacant. Bring them in right sequence (as around 5) to the squares 2, 3, 6, and by a rotation of one square to the position 1, 2, 3. If the third block is at 1 or at 4, shift the blocks in 5, 8, bringing 8 to the corner B, and then A E is a disc-squared rectangle containing the three given blocks and one vacant square, and the three blocks can be brought in the required order to the squares 1, 2, 3. If the third block is at 7, rotate 3, 6, and the vacant square round C B to the positions 8, 5, 2, and again the three given blocks are in a six-square rectangle (A F), and can be brought to the required order in squares 7, 4, 1, and thence rotated round A B to squares 1, 2, 3. These are all possible cases; and as, after thus correctly filling the squares 1, 2, 3, the remaining five blocks are in a six-square rectangle D B, we can arrange them in any order we please except as regards the two which, in the final position, occupy squares 7 and 8.

shown in Fig. 9 are either both even or both odd; in all other positions one is even, the other odd.

Next take a rectangle of four squares by three, as A B, Fig. 12, where the won position for such a rectangle is shown. Here we have to show that a given set of nine blocks can be brought, in a given order, into the squares 1, 2, 3, 4, 5, 6, 7, 8, and 9. It will be most convenient in this case to begin by getting into the squares 1, 5, 9, the proper blocks for those squares. (It will be seen at once, from what follows, that if the

A		C		
	1	2	3	4
D	5	6	7	8
	9	10	11	
			F	B

FIG. 12.

rectangle were three squares broad and four high, instead of three high and four broad, we should begin by the top row of three, the same method applying in all other respects to each case.) Now, of the three blocks for the left-hand column, two must be either in the square C B or in the rectangle D B. In the former case they can be brought at once to the squares 4, 8, in the latter they can be brought to 5, 9, and rotated round A B to the squares 4, 8. Let the vacant square be then brought to the corner B, if not already there. Then, if the third block of the three is in the square C B, the last case enables us at once to bring the three in the right sequence to the squares 2, 3, 4, whence they can be rotated round A B to the required squares 1, 5, 9. If the third block is at 1 or 5, shift the blocks 6, 10, and 11 (11 to corner square). This frees the square 5, and the second case enables us to bring the three blocks to squares 1, 2, 3, in the rectangle A E, whence we rotate them to 1, 5, 9. If the third block is at 9, rotate 4, 8, and the vacant square to the positions 11, 7, 3, and then the three blocks are in a square of nine squares (A F), and can be brought at once in the required order to the squares 1, 5, 9. Then the rest of the rectangle, namely, the square C B, can be arranged, as shown in the last case, so that all the blocks, except those for the squares 10, 11, are in assigned positions.

Note, also, that in this case we might have begun by getting into the right position the four blocks intended to occupy the squares 1, 2, 3, 4. Thus, having first got the blocks for the squares 2, 3, 4, into the squares 9, 5, 1, in the way already shown for any three blocks, we bring to the square 10 the block intended for square 1, doing this by rotation around C B or C F, as the case may require, without touching the blocks in 1, 5, 9; then rotation around A B brings the four blocks into the required squares, 1, 2, 3, 4, in the assigned order.

Lastly, we reach the case of the Fifteen Puzzle itself, shown in the won position in Fig. 1, and again in Fig. 13. We have to show that a given set of 13 of these blocks can be brought to the squares 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, in an assigned order. Here the reasoning is of precisely the same kind as in the two preceding

paragraphs. Three of the four blocks meant for squares 1, 2, 3, 4, must be either in the rectangle C B or in the rectangle D B. In either case we can bring them (directly in one case, by rotation around D B in the other) to the squares 4, 8, 12. If the remaining block is in the oblong C F, we get the four into right order, down the right-hand column of the oblong C B by the last case, and rotate to the required squares 1, 2, 3, 4. If the fourth block is in one of the squares 1, 5, 9, rotate the blocks in 11, 15 (bringing the one in 15 to corner B), and then the four blocks lie in the oblong A E, and can be brought to the squares 1, 2, 3, 4, as in last case. Lastly, if the fourth block is at 13, push down the blocks in 4, 8, 12, rotate those in 7, 3, bringing the one in 3 to corner square 4, and then the four blocks are in the oblong D B, and can be brought into the lowest row in the required order, as in the last case, and thence rotated to the squares 1, 2, 3, 4. After this, the rest of the square, namely, the oblong D B, can be arranged, as shown in the last case, so that all the blocks, except those in the squares 14, 15, are in assigned positions.

I might here go on to show that in any square or oblong whatever, no matter how great the number of blocks in the length and breadth, all except the two can be brought into any assigned order. To do this, all that would be necessary would be to show that, if in an oblong or square of given numbers of blocks in length and breadth the blocks can so be arranged, they can also be arranged in an oblong or square having one more row added either to its length or breadth. For then, having already shown that we can so arrange an oblong of two by three, an oblong of two by four, a square of three by three, an oblong of three by four, and a square of four by four, it follows that we can similarly arrange an oblong of three by five and of four by five, a square of five by five, and so on, without limit. But I leave this as an exercise for the reader, noting only that the method is precisely similar to that by which the last case above dealt with was obtained from the last but one, that from the preceding, and so forth.

In a paper which appeared in the *Australasian* for August 21, 1880, I have proved the above relations, and also the general case, in another way, not quite so simple but more concise; showing that from any given position a certain number of positions must always be obtainable, and that number being (with the given position) exactly one-half of the total number of possible arrangements, must include all the cases of its own kind, that is, either winning or losing, as the case may be.

A C					
	1	2	3	4	
D	5	6	7	8	
	9	10	11	12	E
	13	14	15		
			F	B	

FIG. 13.

I have there also established the following rules for distinguishing winning from losing positions in an oblong or rectangle of any number of squares in the length and breadth.

First, if the number both of horizontal and vertical rows be even (as in the Fifteen Puzzle), the won position, in which the blocks succeed each other in numerical sequence, following the lines as in reading, and leaving the last square vacant, can be obtained from any position in which the "total discrepancy" and the number of the partly vacant square are either both even or both odd ; but if the "total discrepancy" is even and the number of the partly vacant line odd, or *vice versâ*, the won position cannot be obtained.

Secondly, if the number of horizontal rows be odd, and the number of vertical rows even, then the won position can be obtained if the "total discrepancy" is even and the number of the partly vacant line odd, or *vice versâ*. But if the "total discrepancy" and the number of the incomplete line are either both odd or both even, the won position cannot be obtained.

Thirdly and Fourthly. If the number of vertical rows be odd, then, whether the number of horizontal lines be (iii) even or (iv) odd, the won position can be obtained if the "total discrepancy" is even, and cannot be obtained if the "total discrepancy" is odd.

These four laws include all possible cases.

Let me add, in conclusion, that the total number of possible arrangements in a square of ten blocks in the side is so great, that if we imagine each case represented by a tiny globe one millionth of an inch in diameter, and these globes gathered in the form of a great sphere, the extent of that sphere would be greater than that of the entire region of space over which the mightiest telescope yet made by man extends his survey, though, from the remotest star reached by such a telescope, light, with its stupendous velocity of 187,000 miles a second, takes thousands of years in reaching this earth.

It may be noticed, in conclusion, that the above study of the ways of solving the puzzle for six-block and eight-block rectangles will be found to indicate the proper way of dealing with the only cases of difficulty which ever arise in dealing with the Fifteen Puzzle. I wrote the whole of this paper, for instance, without having before me any actual set of blocks, simply drawing mental pictures of the various cases before writing the paragraphs respectively relating to them. Yet, on the first trial with the actual puzzle, I found that four or five minutes sufficed to resolve any position into the final (won or lost) position of its own kind ; and after half-an-hour's practice (based on the principles above explained) I found the solutions averaged only two minutes.

RICHARD A. PROCTOR.

THE DISCROWNED JINGO.

JINGOISM is not dead, and it would not be prudent to assume even that it is sleeping. It is a passion too deeply implanted in the human breast to afford reasonable hope of its final eradication. It is one of the touches of nature that make the whole world kin. We call it Jingoism in England, in France it is called Chauvinism, and in the United States Bunkum. Seen across the Atlantic, or even over the narrower seas that divide us from France, we laugh at it, and thank heaven we are not as other men are—as this poor Yankee with his bird o' freedom, or as these French colonels with their baggy red trousers and their blustering demand to be led in flat-bottomed boats to the shores of England. But when the time comes we succumb to infection ourselves, and are as foolish as any of our kin across the sea. The seeds of disease are sown in our constitution, and in due course we break forth into a sort of delirious idiocy in which we see visions of England maintaining her "ascendency in the councils of Europe," and dream dreams of what noble fellows we are personally, and what abject cravens are those who will not shriek with us or march to and fro defiant at beat of circus drum.

It is an essential part of Jingoism that its warlike spirit should never carry it further than this theatrical marching and counter-marching, and that, since the drum is the proper accompaniment of its martial ebullition, the particular instrument selected should be the gaily painted cylinder of the circus. The attitude of the Jingo in view of actual hostilities is set forth with charming frankness in the famous couplet of his battle-song :—

We don't want to fight, but by Jingo if we do,
We've got the ships, we've got the men, we've got the money too.

Observe, "we don't want to fight." On the contrary, we prefer to stop at home and bray. If it comes to the worst, and there follows, in consequence of our shrieking, what Mr. Mantalini (who, if he had lived in the year 1877, would certainly have been a Jingo) calls "demnition hard knocks," we don't mind paying a small share of the cost of war. We have got the men, fellows of no particular

account out of their home circles, who will go and be shot for a shilling a day. We have got the ships, which would make short work of Moscow and effectively blockade Siberia. Finally, we have got the money—chiefly other people's. What the country did *not* have was Jingo himself, body and bones, to be placed in the forefront of the battle, and there finally and exceptionally justify the reason of his existence. Jingo, in those still recent days, had a very distinct idea of the subdivision of labour. He would stop at home and shout, rattling his beer-glass in Music Hall or his wine-glass at Guildhall. Somebody else should go and fight, and so the ascendancy of England would be maintained in the councils of Europe.

The Jingo is the aggregation of the bully. An individual may be a bully, but in order to create Jingoism there must be a crowd. To this extent a bully is a more respectable individual than a Jingo. Equally with the Jingo, a bully need not want to fight. But his profession made him constantly prone to accidents that sometimes led to his having to strip and give battle. In Mr. Pepys' diary there is a narrative of an encounter between two bullies, which shows how bullydom can sometimes rise to the heights of heroism. It happened one sultry night in July 1667. "Two young bloods, Sir Henry Bellasses and Tom Porter, having dined, were conversing; Sir Henry Bellasses talking in a loud voice. Some of the company standing by said, 'What, are they quarrelling that they talk so high?' Sir Henry Bellasses, hearing it, said, 'No, I would have you know I never quarrel but I strike; that is a rule of mine.' 'How,' says Tom Porter, 'strike! I would I could see the man in England who durst give me a blow.' With that Sir Henry Bellasses did give him a box on the ear, and so they were going to fight there, but were hindered. However, they fought later the same night, and Sir Henry Bellasses was wounded so much that it is feared he will die, and finding himself severely wounded he called to Tom Porter and kissed him, and bade him shift for himself: for, says he, 'Tom, thou hast hurt me; but I will make shift to stand upon my legs till thou mayest withdraw, and the world not take notice of you: for I would not have thee troubled for what thou hast done.'"

This is a speech which glorifies much swashbucklery, and makes us think tenderly of this roysterer of the Stuart time. Sir Henry Bellasses was a bully, and would doubtless on occasion prove himself a Jingo. But he would not have sung "We don't want to fight," or indulged in cheap heroics blustering about his ships, and shaking his money-bags at the head of the surprised enemy.

Sir Henry Bellasses was a member of Parliament in the reign of Charles II., and doubtless from his place below the gangway blustered a good deal against the Dutch. If he had happened to have been born two hundred years later, he would certainly have obtained a seat in the Parliament the return of which marked the establishment of those great principles of which Mr. Disraeli was the embodiment. Whether he would have felt quite at home in the place, and whether he would have thoroughly enjoyed the association with his fellow Jingo, may be questioned. The natural reluctance which the Jingo has for fighting when he meets on equal terms with the adversary does not influence him when he finds the opportunity of doing a little safe blustering. In the last Parliament the Jingo had it all their own way, and noisily lorded it over the minority. It is doubtful whether a man, the chivalry of whose nature impelled him, whilst his life-blood was ebbing by a wound that three days later proved fatal, to make shift to stand in order that his adversary might escape, would have approved the general conduct of the Jingo at this period. Certainly he would not have taken part in the famous, or perhaps infamous, scene which happened on the night when Mr. Gladstone and some others, having exercised their right of private judgment and voted against the views of the majority, were waylaid in the corridor and hooted by hon. gentlemen, much after the fashion that the dog which inevitably turns up on the Derby Day is chevied by the crowd. I am inclined to think that Sir H. Bellasses, whatever might have been his opinion of the political views of Mr. Gladstone, would have turned upon the well-dressed mob and beaten them off.

Jingo to-day is discrowned and set in the dust, comforted only by the sure and certain hope of resurrection. One result of the general election of last spring was considerably to reduce his numerical proportions. He found himself not only dispirited but decimated. The dunghill on which he used to crow, one of a famous company, is now a lonely waste, and the sound of his own voice frightens him. In his best days he was not highly gifted with eloquence. But the theme at his command was one which easily lent itself to speech-making. The talk was tall and filled much space. The colours were bright green and scarlet, which caught the eye from remote distances. A man was not under the necessity of being logical or sensible or even truthful. He had to talk blatant nonsense, the more blatant the better, the more nonsensical the more successful. Ignorance and evil passions were at the bottom of the whole business, and whilst one could not be alarmed by discrepan-

ies, the other could not be surfeited by incessant repetition of the one dish.

The epoch was peculiarly suited to the genius of the great Benjoram, who found himself at the moment in supreme control. Some years ago a statesman who had the gift of putting great truths into small and striking sentences, declared of Lord Palmerston that, having no policy at home, he had deliberately set himself to distract public attention by creating difficulties abroad. At least the first part of this accusation was true in respect to Benjoram. He had come into power on the crest of a great wave of popular enthusiasm. But he was an astute man, and recognised the fact that this feeling was born rather of weariness of too active Liberalism than of a love of Toryism. Benjoram dare not enact Liberal measures, and he could not enact Tory ones. The ingenious compromise by which he legislated in a Liberal-Conservative spirit, and made his Acts permissive, had come to be a little ludicrous in the eyes of the nation. His natural tastes were in the direction of the sublime, and the sublime always has a certain predominating quality of vagueness, in the depths and heights of which the imagination may roam with satisfaction and safety. Benjoram invested Jingoism with an elocutionary attractiveness of which it stood sorely in need. He was clever, entertaining, occasionally eloquent, and often picturesque. He rolled Russia in the dust, exalted the Turk to the seventh heaven, talked vaguely about "nationalities," and never failed to wind up with a peroration in which the integrity of the British Empire had an honoured place.

As an oratorical Jingo he was much more successful than Lord Boanerges. His lordship has a certain directness of speech which rather spoiled his aim. He had the strength and also the single-purpose of a sledge-hammer: going straight at the thing he desired to beat, and not leaving it till it was hopelessly flattened out. The nebulous atmosphere with which Benjoram surrounded the picture he drew was much more successful in bringing about the desired effect. Every one knew exactly what Lord Boanerges meant. If he did not love the Turk he hated the Russian, and "went for" him with the same ferocious joy with which he used in times past to dance around Benjoram himself. As for Benjoram, no one knew exactly what he meant. But there was a general impression that there was more in his speech than met the eye. Of course one in his high official position could not be too communicative. It was evident he could tell more an' he would. In the meantime, the only thing to be done was to leave all to him, voting him the men, the ships, and the money too.

By these two voices, Jingoism, whether in the House of Commons or in the House of Lords, found its highest and most authoritative expression. But brag is an easy game to play, and there were several other more or less notable men who devoted themselves to its practice before an audience sure to applaud. To Lord Echo the opportunity was one eagerly welcomed. Throughout a long Parliamentary career, he had used up all the ordinary topics on which speeches might be made. Not that this was a fatal objection to continuance of speech on the part of the noble lord. His pleasure was to talk. Whether he had anything to say, or whether, having originally had something to say, he had already said it ten times over, was an accidental circumstance which befel, one way or the other, to the greater or less boredom of the audience. To Lord Echo the flux of Jingoism was a phenomenon peculiarly grateful. It was a creed which consecrated the apostle, and made him acceptable to an audience that would have portentously yawned had he risen to address it on any other subject.

To preach Jingoism in the Parliament of 1874 was a double-edged sword in the hand of a Conservative. It smote at Russia, and in drawing back for a fresh blow it hacked Mr. Gladstone. Thus Lord Echo found himself encouraged by unwonted cheering when he poured forth the level flood of his talk on Foreign policy. His lordship was perhaps the most fluent speaker in a by no means taciturn Parliament. Probably no one member spoke so much and said so little. To the pain endured by a hapless audience was added the aggravation of witnessing his lordship's keen enjoyment of his own eloquence and humour. To the unbiassed observer, it seemed that whilst the humorous was altogether absent, the eloquence was constructed on the model of the bubbling of a brook. In one case there is an indefinite quantity of water which, influenced by the law of gravitation, ever flows down, and, meeting an occasional obstruction, gurgles round it. In the other there was an indefinite supply of words which flowed in obedience to mechanical impulse, and were coloured with just sufficient evidence of thought, and connected with just so much appearance of logical sequence, as to make them pass for speech, especially when contributed to debate by the heir-presumptive of an earldom. If Lord Echo had been modest, the infliction need not have been too bitterly resented. But, like Theophrastus Such, his lordship, "in relation to all subjects had a joyous consciousness of the ability which is prior to knowledge." His animal spirits were unflagging, and on resuming his seat after occupying the time of the House for an hour, or sometimes two hours, he has dis-

played the evident conviction, maddening to the already aggravated auditor, that he has really made a clever, entertaining, and conclusive speech. Readers of Rabelais will remember that when Prince Pantagruel was on his famous voyage in quest of the divine bottle, he came upon a group of islands among which was one called Ruach or Wind. "Here," we read, "the people nourished and fed themselves wholly on wind, the poor by means of fans, and the rich by windmills, beneath which, on days of banquets, they sat and regaled themselves, discoursing the different varieties and qualities of breezes just as toppers talk of wines." It was on this island, surely, Lord Echo was born, and, being rich, kept a windmill.

In studying the type of the discrowned Jingo, Lord Echo may stand as a fair representative of the prosperous, uninformed, and chattering member of society, who at the dinner-table settled the Eastern Question between the soup and the fish, and in the intervals of the dance demonstrated that Mr. Gladstone was a traitor who in happier times would have expiated his crimes on the scaffold. Of a higher class was Sir Drumm und Fife. Sir Drumm really did know what he was talking about, having spent some years in the diplomatic service. He represented in the House the type of officialism—a class of the community which, when the balance trembles between peace and war, is always ready to put its foot down on the side of war. Sir Drumm was not a very ready or effective speaker, but he had about him a certain well-cultivated appearance of impartiality. In the present Parliament it may be lamented that evil communications have corrupted this good manner, and that, carried away by the hot-headed enthusiasm of a younger associate, Sir Drumm has sometimes been led into the use of strong language sadly in discord with diplomatic usage. In the last Parliament, his present ally not being old enough to take charge of the affairs of Europe, Sir Drumm distinguished himself amid the violent diatribes of the hour by the moderation of his tone. This restraint of transport with respect to the excellence of Turkey was further established after an official visit to a province long under Turkish rule. When he came back he rather shocked men like Lord Echo by admitting that the Turk was not quite so gentlemanly as he was painted, and that if he could be gently reformed, it would be better for humanity in general and his neighbours in particular. This apparent impartiality endowed Sir Drumm's speeches with considerable interest and some influence. He was at least intelligent and informed—quite unusual characteristics of the Jingo.

The third type, representing a large and influential section of the

population, sat at the corner of the third bench behind Ministers, in the person of Sir Water Meadows, Bart. Sir Water was a county gentleman of military instincts and sound constitutional principles. He had been for a short time in the Dragoon Guards, a circumstance which entitled him to lecture successive War Ministers on minutiae of battalions and details of drill. He was very useful to an astute minister who desired to ascertain the feelings of the important but generally inarticulate country gentleman. Sir Water had fair abilities and great energy, unsapped by his too brief career in the Dragoon Guards. When Parliament was not sitting he was a constant attendant on the magisterial bench, never missed quarter sessions, and generally busied himself about county business. He was not a man of original mind, but was none the less on that account a safe guide to a minister "feeling his way." What the country gentleman thought yesterday, be sure Sir Water Meadows would be saying to-day. He said a good deal in the House during the Jingo period, making it clear that the counties might be relied on to back Benjoram in hurling defiance at Russia. The country mansion and the town music hall were at one on this question, and what the great, and now unhappily recreant, McDermott did for the latter, Sir Water Meadows did for the former. One voiced the spirit of Jingoism in couplets that would scarcely scan, and in measure audaciously borrowed from older musicians; the other from his place in the House of Commons talked portentously in the name of the country gentlemen, whole sections of his speeches being a feeble echo of the vaporous nonsense of the great Benjoram himself.

It was pretty to see how the fervour of Jingoism influenced the oratorical style of Sir Water. He had always, when addressing the House, shown himself deeply impressed with the importance of the remarks he felt it his duty to make. But about the time of the Jingo epidemic he adopted a delivery that would have been funny if it had not been painful. His voice, always loud, grew thunderous. His gestures became positively gymnastic, and hon. members seated on the bench below, careful of their hats, effected a strategic retreat from beyond the range of the sweeping arm with which Sir Water denounced the Despot of the North. But it was in the enunciation of inoffensive and immaterial words that Sir Water achieved fresh Parliamentary fame. He seemed to have brought down with him in his brougham a large stock of emphasis, which he cast upon the chaos of his speech and left to distribute itself. Even properly regulated, it was out of all proportion to the importance of what Sir Water had to say. But being entirely free from controlling direction, it had a ludicrous way

of fastening itself upon conjunctions, possessing itself of prepositions, and thundering round indefinite articles, utterly crushing these inoffensive parts of speech. The most commendable thing about Sir Water's speech was its thorough honesty. He evidently believed every word he said, and felt that, as a country gentleman who had once borne her Majesty's commission and whom a beneficent Providence had gifted with Demosthenic eloquence, it was his duty to come forward at this crisis of the empire and avert impending ruin.

These gentlemen, and others of whom they are types, had a good time of it whilst Jingo reigned. It must be said of them that they have accepted their monarch's deposition with good grace. Perhaps they had got a little tired of shouting. Probably they did not altogether like the company in which a common cause often led them. Or it may be that they simply had the ordinary good sense to accept the inevitable, and comfort themselves with looking forward to the time when, as surely as the sun will rise in the morning, their turn shall come again. Lord Echo has no difficulty in finding other subjects on which to extol his own prescience in long speeches. Sir Drumm und Fife has helped to establish a new power in the State, which, though small in numbers, is rich in diplomacy, profound in legal lore, and illimitable in impudence. As for Sir Water, he has gone back to older studies, and the Yeomanry Cavalry, whose interests were somewhat neglected during the Eastern crisis, are once more receiving the benefit of consideration by his capacious mind.

But Jingoism is not dumb, even in a House of Commons whose election dealt a crushing blow at it, causing monarch and crown to tumble down. It is not a very strong voice, and there is reason to believe it is not encouraged by the party in whose behalf it is persistently raised. Even Jingoism shrinks from being represented by Mr. Hystericus-Partlette. But the future historian, or the student of particular phases of national dementia, will probably accept him as the incarnation of the principles and characteristics which go to make up Jingoism. Essentially and constitutionally feeble, Jingoism is blustering, inaccurate, spiteful, pertinacious, and wholly devoid of the chastening influence of a sense of humour. It seems a little unreasonable that a cause so constituted should, with what energy is left to it, resent the championship assumed on its behalf in these latter days by the hon. gentleman who the other day told the Wolverhampton Conservatives that "next session he should deal with Mr. Gladstone more severely than ever."

Mr. Hystericus-Partlette having had his attention more directly

called to foreign affairs, has somewhat arrogated to himself the position of chief mourner for his discrowned Majesty. There is, however, another gentleman in the new House of Commons who, upon occasion, is ready to take up and wear the famous sword garlanded with lilies of peace, long since fallen from the hands of Lord John Manners. As Mr. Hystericus-Partlette represents an animated parody of the Jingo orator, so Mr. Warthead may be accepted as a fair specimen of the mob who supported the movement. He is a very favourable specimen of the class : being not only respectable but honest, and, according to such lights as have been vouchsafed to him, really believing all he says and all he attempts to make clear to others. Politically, he has been born since the time of Mr. Mill. But his existence proves the everlastingness of the truth involved in a famous aphorism put forth by that gentleman. Mr. Warthead is simply, unaffectedly, and often amusingly stupid. Intellectually (if one may use the word in this connection) his vision is blinded and distorted by two phenomena ever present. On one side is a light of purest ray serene, irradiating by its beneficent effulgence all the pathways of life. This is Lord Beaconsfield. On the other flames an evil star, dazzling in its concentrated force, blinding the beleaguered traveller, and luring him to inevitable destruction. This is Mr. Gladstone. With one eye affectionately fixed on the benignant luminary, and the other attracted by the demoniac glare of the evil star, it is no wonder that Mr. Warthead should not clearly see the smaller matters of everyday political life. To a mind thus constituted, Jingoism presented itself with irresistible fascination. It sounds well, looks large, deals with generalities, imposes no personal responsibilities, has Lord Beaconsfield among its prophets, and supplies promiscuous opportunities for casting stones at Mr. Gladstone.

THE MEMBER FOR THE CHILTERN HUNDREDS.

ON A CATTLE STATION.

THE morning of Boxing-day was raw and cold : a fact quite deserving of mention, because two days earlier, travelling in the train from Brisbane to eat our Christmas dinner with friends on the Darling Downs, we had experienced great heat ; had run into a magnificent thunderstorm at the foot of the mountains ; ascended the range with lovely rose-coloured lightning revealing the ravines and far-away woods ; and finished the journey to Toowoomba with the accompaniment of muttered thunder and fading flashes in the west. It was one of those days when you might naturally wonder whether it was possible ever to be cool again. Yet the grateful thunderstorm had effectually cleared the atmosphere, and the Christmas holidays were, in all parts of the southern half of the Colony, most enjoyable.

Upon the Darling Downs, some two thousand feet above the level of the sea, it was a little more than cool, and I was roused out of bed before daylight on Boxing-day morning to indulge in the novel sensation of a shiver and moral cowardice in the bath-room. My host, however, was a man who never allowed any one time for shivering, and in the very grey dawn at that time, with a dull day, shortly before six o'clock, the buggy wheels crunched upon the gravel, and the horses stood pawing at the foot of the steps. From a ridge, divided from us by a long valley, in which the town of Toowoomba lay sleeping and hidden, the mountain mists rolled in volumes, saturating all they touched as effectually as if they were real rain, instead of wreaths of soft wool driven before the wind. It looked a most unpromising day for travelling, but B. would hear of no shirking, and peremptorily ordered me into the buggy. The bay horse reared in impatience, the brown mare thrust herself into the collar, and we were off, speeding swiftly over the sandy road, and not a glimpse of sun to cheer with the promise of warmth.

Soon we were at the verge of the table-land, and twelve miles out we were upon the plains 700 feet lower than the point from which we had started, the wheels clogged with the rich black soil, the horses sweating, but spinning easily along. Miles upon miles of

greyish green plains, with intervening ranges, and dotted with clumps of scrub, opened to view as the gradual descent was made : the cattle and sheep looked wonderingly up from their glittering pastures ; blue mountain parrots flew overhead, and the horizon was a boundary of shadowy mountain barriers. The plain here bore a distinct and sudden peak or rounded hill ; there the wooded spurs encroached upon the level, and saved it from being monotonous. B. had prophesied that the chilly mists and forbidding clouds would prove peculiar to the higher land : were, in fact, of distinctly mountain birth. And so they proved to be ; for once fairly upon the plains, the sun appeared, and we were glad to throw aside our ulsters.

It was heavy travelling. The thunder-storms had brought the creeks down in a very decent imitation of flood, and the black soil was a paste that clung to wheel and hoof with leech-like pertinacity. The first stage was to be done by the bay and brown pair, town horses that were taken back next day by the groom in sorry condition. For six or seven miles they were plunging through water knee-deep ; and through one marshy flat there ran a rapid stream, out of which we put up probably a couple of hundred black ducks. This stream turned out to be the road track, converted for the time into a channel for the rain-water draining from higher ground beyond. About noon we came to the banks of a creek running swiftly, and upon the brink we paused. To the soliloquy of B., "Now, where shall we cross?" I replied, "Good heavens ! you never mean to drive through this !" His answer was an inspiring shout to the horses, a sharp application of the whip, a heavy foot upon the brake, and a quick descent into and through the river. There was no ford or track at the spot, but fortune favoured us, and the staunch horses landed us safe on the other side. It was an ordinary incident of colonial travel, successfully accomplished by experienced judgment and prompt boldness. Of this kind of plashy travelling we had some twelve miles ; and when at length we emerged from the swamps, and approached the station where horses were to be changed, the bonny bay no longer pawed the ground and arched his neck. A portion of this station was fenced with wallaby-proof fence—a high, close paling, reminding one of an English park, and that cost from £80 to £100 per mile. It was rendered necessary by the numerous marsupials that infested the scrubs, within which the fence confined them. At the station a civilised aboriginal, trusty and smart as any white man could be, with the head stockman from the run of which B. was part proprietor, awaited us with six horses, by which, turn and turn about, we were to complete the journey.

Here we plucked luscious figs from a beautiful garden, and took a hasty luncheon with the owner of the station.

The station buggy into which we were now transferred was a strong vehicle, built especially for mountain and bush travelling ; a compound of the ordinary Abbot buggy and an American express waggon. How it survived the journey was wonderful to my eyes, and that a month or two afterwards it broke down occasioned me no surprise. The jolting was something to remember. B. was a masterly whip, and from the first I had confidence in him, else that drive to and from his station would have been a period of terror. His theory was that, come weal or come woe, it was the correct thing to keep the horses going, especially down the side of a mountain, into and out of a gully or crack ; and to let them know from the start that the responsibility was theirs. Crushing through underwood, grazing trees in the bush, thrown sometimes a foot high in the air, swerving around sharp curves in precipitous passes, and always rattling on at full speed, we pulled up at sunset, having travelled seventy-five miles. It was enjoyable in so far that the driving was good, the scenery of the mountains magnificent, and the constant change of country novel. At one broad creek in flood we were piloted over by a cattle-driver who fortunately happened to have ridden through just before our arrival, and on our return journey, when the waters were down, we plainly saw that, had we diverged a yard from the line taken by our guide, we should have had to swim for it. As it was, though I seemed to be coolly smoking my pipe when the stream rushed through the bottom of the buggy and its roar was loud around us, I was secretly quite ready for a leap into the yellow current.

The horses continually challenged admiration, as they so often do in the colonies, where they are the friend of man to the fullest extent, not so much because of their good looks or proud pedigree, as because of their intelligent everyday services. At a moment of peril you can implicitly trust them, and they are surprisingly docile. How can one help feeling an absolute affection for them? The horses we were using were grass-fed, had been caught wild and broken in upon the station, but nothing could exceed their endurance or intelligence. After a stage of eight miles, the buggy would stop. The spare horses, which had all the while been running loose close to the buggy, would stop simultaneously, and feed around until the stockman and his assistant had ridden up and dismounted. Then the animals in harness were allowed to go at large, and another pair substituted. It never occurred to one of these horses to run away. Of their own accord, rather, they cantered along with the

buggy, sometimes behind, sometimes by the side when the bush was sufficiently open, and occasionally a few yards ahead. They seemed to be inspired by the energy of my companion, and answered his call as if they were creatures of reason. I cannot say how the driver felt at the end of his seventy miles' work with whip, rein, and voice ; for myself, I went into the station where we were to spend the night, as a man would feebly walk who had been beaten with many stripes ; and it was sweet in the evening to lie in the verandah hammock, and watch the stars reflected, twinkle and all, in the lagoon, and hear the melancholy cry of the stone plover, the contented quack-quack of the wild duck, and the distant howl of the dingo. The station was the only habitation within leagues. B. and I alone of the company—our young host and his wife and baby had never been to the old country—could talk of what Boxing-night meant at Drury Lane and the other London theatres, and compare the scenes with which we were both familiar, with our present exceeding solitude in the Queensland bush.

The next day was in the nature of a holiday. B., as Member for the district, was patron of some local races at a bush township fourteen miles distant, and that was the extent of our travel. Not sorry was I ; nor sorry could have been the horses, which were rubbed down, and turned into a paddock to enjoy themselves. I had not previously seen how horse-racing was conducted in the bush, far from any township larger than a village, and was curious to acquire the experience. Till then, I should not have thought it possible for this class of amusement to be harmless. It was the pleasantest spectacle imaginable : a Sunday School might have attended it without evil. It was conducted throughout from a genuine and innocent love of sport, and was almost Arcadian in its simple surroundings.

The township was of the orthodox bush pattern, only, perhaps, prettier in its surroundings than usual. There were a courthouse and the residence of the police magistrate, who is always the leading inhabitant ; two hotels ; a store ; post and telegraph office, and scattered wooden houses for the accommodation of the few hundreds of people forming the population. But there was an exceptional amount of village green between the higher and lower portions, and the flocks of geese and rooting pigs roaming at large imparted an old-country appearance to it. The racecourse was a mile and a half outside the township, and approached by a sandy-bank track. It was a rude but good course for such races as were run—an oval cleared in the forest, with no railings or fence, but fairly level, and with no dangerously sharp turnings. There were no stands, grand

or otherwise ; and the judge's box was a homely sort of movable pulpit shaded with canvas and boughs of she-oak. From the neighbouring stations, within a radius of a score of miles, the stockmen and shepherds came in, in many cases to enjoy the one holiday of the year, all on horseback, with their dirtiest cabbage-tree hats—in the bush, the nearest approach to full dress—best Garibaldi shirts, and unapproachable moleskins and boots. Servant girls cantered in, proud in their habits and feathers. The selector drove in his family in spring cart or dray, but the rule was for everybody to be mounted. Before the sheep-bell rang for the first race, you might see small boys and laughing girls galloping over the course, and at the tail of such a squadron I saw an old woman of sixty-five lashing her rough pony into a canter. The lady riders during the races massed together on horseback under a clump of trees : the gentlemen galloped madly amongst the timber, cutting off corners, with the view of seeing as much of the running as possible. There was no disorder, no audible betting. The only drunken man I saw during the day was a black-fellow upon a wild long-legged horse, and he, having been once a trooper in the native police, caused great amusement by patrolling up and down with drunken gravity for hours together, fancying he was on duty, keeping his horse at a sharp walk, and as often as not leaning over its mane in fitful slumber. And the racing itself was excellent. The horses and riders were all known, and the contests were *bonâ fide* trials of strength.

After a night's rest in a most comfortable hotel, where the mosquito curtains, for a wonder, were without holes, and where a print of one of Rolfe's incomparable angling pictures, and a coloured representation of punt-fishing in the Thames, hung in the dining-room, we resumed our rapid journey. The country was still partly mountainous, and there were several creeks to ford. By one o'clock we had left our thirty miles behind us, and were at the head station, which for a while was to be home. It was a new kind of country to me, more picturesque than any I had seen before. In Queensland you can, indeed, get every kind of country ; and here the distinctive features were the silver leaf, iron bark, and ridges, alternating with fertile flats, covered with the fattening blue grass. It is known as first-class pastoral land, and amongst the best for cattle that the colony possesses. After a long day's travel, during which you have not seen a human being, and scarcely a sign of animal life, as you swept through the everlasting forest, the squatter's house, surrounded by its patches of maize and miscellaneous cultivation, and flanked by its outbuildings and enclosures, is welcome. On

this occasion it was welcome in the extreme. There were the fruit-trees in the garden ; here, a solitary inclosure sacred to the lonely dead ; beyond, a disused shearing shed ; then the workmen's huts, each with a few peach-trees shading the roof ; and finally the big house, surrounded by vines and figs, crowning an eminence. The faithful horses, running loose, recognised the end of their journey ; reeking in sweat as they were, they set off up the slope as lively as kittens ; and the pair in the buggy did not require their driver's " Now, then ; home, boys !" to make a final effort and take us up flying. The house commanded a fine view of cultivated flat, covered with the dark green maize, of which there was one fenced-in patch of 21 unbroken acres, or with the quick-growing lucerne, which in this country yields four crops per year. Sheep, cattle, and horses grazed across the creek ; and beyond the flat the iron-bark ridges rose terrace-like till they terminated the prospect. From the verandah, whose blinds were the foliage of a superb *wistaria*, one never tired of studying such a pastoral picture as this ; so wide, so suggestive of dropping fatness, so many-featured, so bright under sunshine, so dreamy and mysterious at the too short transformation occasioned by the tints of sunset.

The run, upon which I was to see life amongst the cattle, was in the mountains, where the air was balmy and cool, and where the spirits rose high. Night gave sound sleep : morning brought a natural hilarity and elasticity that made you ready to do and dare anything. Day gave no unbearable heat, nor mosquitos, nor the lassitude common at times on the lower lands of the coast. Evening found us returning from our expeditions with wolfish appetites and pleasant weariness that many a jaded London man would gladly purchase at high price. The more I see of the colonies, the better can I understand—what at first seemed wholly unexplainable—why, after a few years' experience of the free patriarchal life of which this cattle run was a type, people who can afford to live in the centres of the world's highest civilisation, and command all the comforts and luxuries of the old country, prefer—actually and deliberately prefer—the independence and limitless elbow-room of these quiet, sunny, remote pasture-lands.

To be sure, the quiet is now and then broken. For example, on the afternoon of my arrival at the station, while we were dozing in the shade, a fearful hubbub arose amongst the tame blacks who were allowed to erect their gunyahs and keep camp near the slaughter-yard, about 300 yards beyond the stables. The mailman had indiscreetly, and in defiance of the law which prohibits a supply of liquor

to aboriginals, left a bottle of rum as he rode by, and three or four of the black-fellows, wrought to madness, had seized their weapons, and put their camp in an uproar. Gins were yelling and cutting into the fray with sticks ; knives, nullahs, spears, and tomahawks were gleaming, blood was flowing, and the place was a Pandemonium, when my friend's partner, his superintendent, and a couple of stockmen rushed upon the scene, laying about right and left, and finally quelling the disturbance. We watched a hideous gin binding up the wounds of an old warrior who was badly gashed, and shrilly rating him as he lay prostrate on a sheet of bark ; and though there was no further fighting, we could hear, for a couple of hours or so, intermittent yells and jabbering. But this was a novel episode. The blacks are generally quiet and harmless, and attached to the station and its owners, who treat them kindly, exercising a paternal supervision over them. Paddy, the useful fellow who had accompanied us as described, and whose smartness and energy were not surpassed by any white man upon the place, lived of his own free choice in this camp. He dressed as well as a European mechanic, and his employers gave him a habitation in keeping with his attire. He and his family occupied it for a while, but one morning they evacuated the tenement, and returned to the smoke and dirt of the bark gunyah, where the piccaninnies might roll and run about naked, and Mrs. Paddy, when she was not assisting in the station laundry and kitchen, might smoke her pipe and croon with her sable sisters.

Young men coming to the Colonies to enter into pastoral pursuits never live down their hatred of sheep-farming, nor their fondness for cattle. The movements of the latter are naturally more lively, and the operations incident to their breeding make more demands upon the manly qualities which bushmen prize. Scores of highly born and bred men live by droving cattle, involving, it may be, a journey of hundreds of miles, through unknown country. The drover, or "overlander," has a twofold object : to bring his herd to its destination without loss, and in good marketable condition. To do this requires generalship, endurance, knowledge, and patience, and a certain instinct that with many seems to be inborn, enabling them to steer a direct course where others would be hopelessly lost. The trip of the brothers Jardine from Rockhampton to Cape York has thus become historical in the annals of settlement in Queensland.

What shearing is to the sheep stations, mustering is to the cattle run, namely, the chief operation of the year. We had some "fine times" at this business. After breakfast, solid and plentiful, and despatched close upon sunrise, a general movement would be made to

the horse-yard, into which perhaps twenty horses had been driven from the paddock. The horses for the day having been selected, the remainder would be turned out again. Saddling came next, each man attending to his own wants. We made quite an imposing cavalcade at starting. By-and-by we should be distributed on special duties, ordered by the head stockman, who was commander-in-chief; but we set out from headquarters in a body, to wit : my friend and his copartner; the head stockman and his invaluable henchman, Paddy, the black-fellow; four lively young gentlemen, sons of the partners, home from the metropolitan grammar-school for the Christmas or Midsummer holidays; the superintendent and myself, the kindly considered interloper; and an odd boy or two caracolling in the rear and on general outpost duty. How the regular station folks, to whom these expeditions occurred as the routine of daily work, felt was not told; I felt young again, as if no silver threads were being woven; in short, as if I was as much a boy as those wide-awake holiday-keepers from the grammar-schools. But, then, the sky was so high and clear; the morning air so bracing; the country so verdant. Like the horses, I wanted to be off at more fiery haste than a quick walk, and would fain have cleaved the air like thee agle flying overhead. Before night, however, the horses would want their strength for practical work; I had forgotten for the moment that we were not a party of pleasure.

There were two musters in the year for branding the young calves, and creating as many fat bullocks for the future as could be obtained. Every five or six years there was a general muster technically termed square-tailing, the object being to ascertain the precise number of cattle upon the station, and compare tails with the book entries. Owners of cattle runs at this period were not in very hopeful mood. Bullocks which three years before were fetching eight pounds per head could not now be sold for half the amount, and men who had been sailing near the wind, and entering upon pastoral pursuits in too speculative a spirit, were in a condition not to be envied; balance at bank overdrawn, markets glutted, and little immediate prospect of better times. Quantities of country taken up under the Pastoral Leases Act, and upon which the leaseholders had stood to make a fortune in half a dozen years, had to be abandoned. Ruin stared many in the face, and was close upon them. Prudent men, like the owners of the run I had travelled far to see, resolved henceforth to put flocks of sheep upon the suitable portions, for wool always pays, even if droughts carry off the sheep in hosts, as described last year in an article in the "*Gentleman's Magazine*" upon sheep

station work. Here was a forcible illustration of the precarious nature of squatting. One morning a butcher's man arrived from Brisbane to draft out 150 bullocks for market, and I had the honour of assisting in the drafting, being stationed on one side of the mob to see that none broke away in that direction. The bullocks selected were a splendid lot, chiefly shorthorns, and numbers of them averaged 800 lbs. each. They had been purchased two years before, when prices were high, a bargain at £4. 10s. per head ; they had eaten two years' grass, and were now being sold at ten shillings per head less than their primary cost. The townspeople, who are fond of talking of "the bloated squatter," too often overlook this aspect of the question. Just now (May 1880) the success of the Strathleven experiment is dispersing the gloomy forebodings, and frozen meat is looked upon as the sheet-anchor of the future.

Our first expedition was to cut out the cows and calves of a large mob driven in from a distant part of the run to a "camp" about six miles from the station. Very exciting and pretty work it was. The youths and myself were stationed around the camp—an open space in the forest, where the trees were enough for shade, but not too many for free movement ; and it seemed to me that when the business of our department was slack, we occasionally allowed a cow and calf to escape for the express purpose of riding after them. Be that as it might, there was plenty of hard galloping for the head stockman and his assistants in the thick of the herd, twisting and doubling after the particular animal they had fixed upon, and performing splendid feats of horsemanship in the pursuit. The horses knew their work as well as the riders, and entered into the game as if their hearts were in it. The cows and calves by-and-by became considerably mixed, and the uproar made by the cows which had lost their progeny was deafening. The cows without calves were allowed to depart as they listed, and when released they set slowly off by one consent, grazing their way leisurely back to the particular part of the run from which they had been brought.

The neighbouring mountains echoed the din marking our return, slowly driving the cows and calves before us. In the rear of the mob an undue proportion of calves struggled and cried, and it was painful to witness the distress of their mothers as they frantically searched for the lost. The lowing of kine is a favourite article of the poet's stock, and would be one for the painter too if he could transfer it to canvas. The bellowing of a hundred "mothers of the milky herd" in sore distress was quite another affair. Dogs barked, stock whips cracked like pistol-shots, as the procession moved at

the rate of two miles an hour along a sweet valley adorned with many a green bluff and cool ravine and creek, into which the herd plunged pell-mell, always increasing the number of bewildered little stragglers in the rear. In passing through the gates, which upon this run were employed as an improvement upon the cumbersome slip rail, the number would be still further increased, by reason of the crush and the inevitable fate of the weak under such circumstances. A cow more agonised than she could bear would at times charge back, to be met by vigilant dogs and the stockman's whip, and despatched in hot haste into the ruck once more. The sun was dipping behind the ranges when the noisy collection was safely enclosed for the night in a small paddock near the branding-yards.

The next day was devoted to branding, cutting, and ear-marking; and having seen 140 head disposed of, the cup of my experience in those operations might be fairly considered brimful. There was none of the shouting, swearing, and flaying with stock whips that I had been taught to expect; nor any of the hairbreadth escapes which figure so largely in colonial literature. The proceedings were quiet, orderly, and even prosaic, for the appointments of the branding-yard comprised the latest improvements. The use of the head rope, and consequent hunting, scruffing, and lassoing of the cattle in the dusty yard, had been long tabooed. There were large strong pens for the reception of the beasts in convenient instalments, and a long lane about four feet wide within solid fences eight feet high. Into this passage the calves were thrust, leaving the cows at their old game of hullabaloo in the inclosure without. The centre of the lane was divided into sections by four gates, opened and shut at the proper moment by a person perched upon the eight-feet fence, and who by a simple arrangement could control the entire number without changing position. With this janitor, the situation being out of harm's way, and nicely shaded by a roof of fresh-cut brush-wood, I associated and watched.

A heifer, that had passed through the necessary ordeal at some previous branding, presenting herself by mistake, one of the gates is opened, and she shot out of the trap into freedom. The next in order was a vigorous yearling bull, for whom a different fate was in store. To him opened another gate, and, goaded into anger by preliminary handling and the ignominy of temporary imprisonment, with eyeballs glaring and muzzle frothing, he plunged and snorted, evidently using what with his order was tantamount to profane language. One of these young bulls, half leaping and half climbing, had just before cleared the eight-feet fence and got away. The more

reasonable calf, however, found himself in a compartment not much beyond his own length, with the freely-swinging gate clapped-to behind him before he knew where he was. It might stand comfortably, but there was no room for cutting unnecessary capers. A slip rail was removed; the calf moved forward; his head was caught in a bale. Paddy put a thong of greenhide round his hind leg, spite of his desperate plunges, a man opposite roped his fore-leg, the bale-beam was released; his head being free, he made one bold rush, bellowing; the ropes tightened, and our friend lay sprawling upon his side, with the branding-iron hissing on his flank, a man standing on his head to keep him quiet, and another cutting a "keyhole" slit out of his ear. Meanwhile, the branding-irons had been sent back to the hot ashes, and the head stockman (who is chief operator) did what else is necessary. These operations were effected, and the victim was cantering at large in the bush in a tithe of the time occupied in this description.

And then the same thing was repeated until the day's work was done. The weaners—calves from six to twelve months old—were turned, through a gate of their own, into a distinct inclosure, to be sent to the heifer paddock, from which, being weaned, they would join the herd on the run. Calves ought to be branded when very young; but amongst our 140 there were several a year old, and they invariably made a fierce fight. They had been either missed in a former mustering, or might have been too tender to travel in from their camp, and, at the drafting or "cutting out," had been allowed to go scot-free. A young bull which does not go through the branding-yard before he is a year old is pretty safe to make what is called a staggy bullock.

The letters composing the brand must, according to law, be three inches long, and the art of branding is to burn through the hair dead upon the skin, without injuring it. The calf, of course, is not enamoured of the frizzling and singeing; but it is more frightened than hurt. The use of the knife in the other operations must be painful for the time; but the patients did not appear to be keenly troubled once they had gained their liberty. It was necessary to get out of their way when the thongs were removed; but they did not linger long. After shaking their heads and recovering their senses, they galloped away and mingled with their companions, to find their grief-stricken mothers. The business went forward with the regularity of clockwork, and in a given hour and a quarter sixty calves were disposed of. But this was reckoned particularly smart handling. Each station has its special brand; and necessarily, in a country

where there are so many cattle and so few human beings, the requirements of the Brands Act are rigidly enforced.

The cows and calves, set at liberty from the large inclosure, made a rush to the water-hole, and drank deeply. They were then escorted a mile or two in the direction of their "camp," which, in this instance, was nine miles off. Turning neither to the right nor left, they would feed at ease, until they arrived at the spot where, day by day, they congregated in the shade.

The run presented picturesque features, far removing it from the ordinary tameness of Australian landscape. Its grasses were abundant and fattening ; it possessed immense flats capable of growing corn and potatoes in any quantity. I saw a large patch of English potatoes that would not discredit Ireland herself ; and the maize was a picture of plenty. There were high ridges, in which wild horses and kangaroos abounded. They are worth a chapter to themselves ; and I will only here mention, with reference to the former, that they are called "brombies," that they are descended from valuable horses escaped from an old stud farm, and that they are broken in without much difficulty. The horses that brought us up so splendidly were all "brombies," and so were most of the animals employed on the station.

Silver-leaf iron-bark country is always in high repute for grazing. It is the prettiest type of Queensland pasture-land I have seen. The iron bark proper is a big, black-trunked, hard wood of commercial value, but not elegant in appearance. The silver-leaved variety is more ornamental than useful. The trees upon this run were far apart ; they were small, the trunk seldom exceeding a foot in thickness, and they bore a branching head of full foliage, of a blue-green tint, that gives them a name. There was no weariness to the eye in being amongst them, as with the common eucalypti, and, there being no under-growth, the sward was open and fresh. Upon the flats the usual gum-trees abounded, save where—another token of good land—the comely apple-trees held possession. Upon the veritable mountain ridges of one corner of the run there were magnificent scrubs of bunya pine, to which the blacks periodically resorted, to feed upon the succulent kernels of the large cones. Roasted as the blacks only can roast them, they were as good as chestnuts.

There were, "more or less," as the pastoral advertisements always say, 7,000 head of cattle upon the run. In the bull paddock there were 60 grand animals peacefully feeding, some of them sires imported at considerable expense. The stud Herefords were especially handsome, and in the heifer paddock you might pick out a

dozen of their progeny fit for an English agricultural show. Many Australian graziers prefer the shorthorn. There were 1,200 fat bullocks waiting better markets, besides the mob that were travelling down to Brisbane, a distance of 150 miles, at the rate of eight miles per day. The breeding cows were reduced during the drought of two years ago, but there still remained 4,500. The residue were steers and heifers.

The word paddock will not to the English reader convey an adequate idea of the area of the inclosures. The bullock paddock, for example, into the centre of which the herd had been driven for the butcher's drafting, contained 6,000 acres, and was securely fenced in with the usual post and rails. And this was not the largest cattle run in Queensland, though it was much above the average.

The noon-day rests at mustering expeditions were delightful. They were if possible on the banks of a creek, and under the shade of a group of trees. The bridle reins were pulled over the head and passed round one of the stirrups, leaving the horses free to graze, and so well were they accustomed to their work and masters that they never moved far from the camp fire, where the inevitable quart pot of tea was kept ready. So we sat around upon the grass, the piece of cold boiled beef and the loaf were passed from hand to hand, each sliced off what he wanted, and, with the cheap effective sauce of hunger, ate as hearty men who had earned a meal should eat. The *bonâ fide* workers wasted no time in lunching, but I could afford to lie face downwards upon the grass, the cicadas in all the trees in perpetual concert, and lazily ruminate upon the fascinations of pastoral life upon a run of this description, containing 280 square miles, for the most part beautiful and high-class grazing country. In the evenings we spent fleeting hours at the whist table or piano in the drawing-room, where the lady of the house, her daughter, and governess, made us agreeably acquainted with the softer side of station life.

The exciting occupation of moonlighting we had no opportunity of sharing. It is a frequent and necessary one upon many cattle stations, but here the few scrubs were remote and insignificant. The object is to capture the cattle that have gone wild and inhabit the inaccessible fastnesses of the scrub. There they remain during the day, coming out into the open at night to feed. Quiet cattle are taken as decoys, and the horsemen by dint of breakneck racing cut off and run in as many as they can. When captured, however, they are scarcely worth the trouble of keeping, being illbred and averse to beef-making. It is nevertheless the proper thing to keep them down,

on account of their propensity to entice the station stock away from their duty. Should the "scrubbers" be utterly worthless, they can at least be slaughtered for the sake of their hides; and the likely ones may by a little care be trained to be good working bullocks. Moonlighting, therefore, upon the whole is not a remunerative affair, and it is the custom with some to shoot the scrubbers down on the spot.

New Year's Day fell during my visit, and we saw the old year out at a neighbouring station eighteen miles distant. It was a glorious ride, by lily-covered lagoons and across grass-covered plains, and the hospitable entertainment that awaited the visitors who came in from all directions was more the genial merrymaking of the olden times than the formal gathering of modern life. One young lady, reputed to be the happiest, merriest, best-tempered damsel of the district, had travelled seventy miles to be one of the party, and our host had driven half that distance to transfer her from the saddle to his buggy. A hearty, unceremonious welcome there was for every new-comer from host and hostess; the long table on the verandah, overlooking lake and plain as far as the eye could reach, groaned day and night with abundance; and another verandah hung around with flags made an irreproachable ball-room. We observed the time-honoured custom on the stroke of midnight, and separated, north, south, east, and west, after two days' genuine enjoyment, declaring that it had been good to be there.

The days that had intervened between our journey up and down having been without rain, the foaming, roaring currents had become ignoble creeks, showing us that in two fordings we had narrowly escaped plumping into holes. Our old friends the "brombies," driven in from the grass the previous night, were in fine spirits, and my friend, according to his custom, kept them going. "There is less chance of accident; the horses like it better; and it is the only thing that makes a long journey tolerable," he would say. Our first pair shied at a dead dingo lying in the road. It was a remarkably fine specimen of the tawny native dog, but its bushy tail had been cut off by the slayer, who, upon producing it at the head, would receive a bonus of two figs of tobacco. As we passed, a iguana crawled from the interior of the carcase, and hurriedly up a tree. Down the mountain roads we went at hard gallop, quite conscious that the giving way of a single buckle or bolt would in all probability roll us, very much mashed, into a rocky ravine. But, as my companion observed, "there's nothing like keeping them going," and it really did seem as if the plucky brombies steered better and ran freer when their blood was up.

On this trip we were not troubled with mosquitoes, nor, in this mountainous district, are they ever so troublesome as on the coast. Black duck, whistling duck, wood duck, spurwing plover, and curhen were plentiful, and for the first time I saw the squatter pigeon, a pretty little brown dove that derives its name from its habit of squatting on the ground. They were generally in pairs, and when disturbed, lazily flew into the nearest tree. The birds are so tame that the blacks knock them down by hurling their nullahs; and stockmen kill them with their whips. They are excellent eating. Every variety of parrot was to be seen, and quail we could put up at pleasure. What, therefore, with sport, cattle-mustering, evening amusements, and New Year's festivities, it is needless perhaps to explain that six days' travelling with a friend whose kindness and powers of entertainment were as capacious as his body, albeit our roads or no roads—the roughness of which I cannot adequately describe—were more than counterbalanced by the total results.

REDSPINNER.

THE INVINCIBLE ARMADA.

AT last the day, big, not with the fate of Cato and of Rome, but of England and the Protestant cause, had arrived. After months of preparation the splendid fleet which Philip of Spain destined for the humiliation of the English and the establishment of Catholic ascendancy, was ready to quit the harbour and put to sea. It consisted of one hundred and twenty-nine vessels, well supplied with cannon, and containing provisions sufficient to feed a powerful army for six months. On board were twenty thousand soldiers, animated with all the enthusiasm of the fiercest religious bigotry. The plan formed by the King of Spain was that the Armada should sail to Dunkirk, should there embark the Spanish troops in the Netherlands, under the command of the Duke of Parma, then cross over to Margate, land the Spanish army, and at one sudden and decisive blow complete the conquest of England. The expedition, which was thus to crush the might of a whole nation, was no mere vulgar enterprise, inspired by the usual aims of secular ambition. It was a crusade, a holy war, a religious undertaking. As the Christians in days of old had invaded the East to stamp out the power of the infidel, so now the Catholic turned his eyes towards England, the head and front of aggressive Protestantism, and resolved to lay her low, so that she no longer could give her aid to the foes of Holy Mother Church, then warring against Spain to establish heresy in the Low Countries. Therefore, her cause being the cause of heaven, the Armada was to be worthy of her high calling, and free from those earthly stains which so frequently dimmed the lustre of warfare. Her mighty galleons bore no names of heathen gods and goddesses, or of the heroes of Spanish story, but were christened after the saints. On board the discipline of the Church was to be united with the discipline of the navy. Mass was to be celebrated daily, and all on board to attend and do homage to the Host. All gambling, swearing, and licentious talk were to be punished with severity. Every man was to accompany the expedition. On the ships no women were not to be permitted to land. Every effort was to be made to create a good feeling between

the soldiers and the sailors. Quarrels and contentions were to be avoided, and Christian charity and harmony encouraged. It was ordered that every morning the boys, "according as is accustomed, shall give the good morrow at the foot of the mainmast, and at the evening shall say Ave Maria, and some days the Salve Regina, or at the least every Saturday, together with the Litany." Religion, and not war for its own sake, was the object they had in view. "First, and before all things," proclaimed the Duke Medina Sidonia, the commander-in-chief of the expedition, "all persons are to understand, from the highest to the lowest, that the principal foundation wherewith his Majesty hath been moved to make and undertake this journey hath been and is to the end to serve God our Lord, and to bring again to His church and bosom many people and souls which, being oppressed by the heretic and enemies of our holy Catholic faith, they keep in subjection unto their sects and unhappiness."¹

The purpose of the Armada was made still clearer by the publication of a most offensive pastoral letter from one Cardinal Allen, a renegade Englishman, who accompanied the expedition as Archbishop-elect of Canterbury and Legate for England. In this "roaring hellish bull," as Lord Burghley calls it, or in this "blast or puff of a beggarly scholar and traitor," as Elizabeth herself politely designates it,² the Cardinal certainly does not mince matters. "Spain," said he, "does not war against Englishmen, but against Elizabeth, the usurping heretic, the bastard, the issue of incest, the shame of her sex. It is not England," he cries, "but her wretched queen, who has overthrown the Holy Church, who has persecuted the pious Catholics, and who has advanced the scum of mankind to the sees of the bishops and the livings of God's priests. Let the English people, therefore, rise and welcome their deliverer, and follow no more the broken fortunes of a mean and filthy woman, unless they wish to fall under the curse pronounced by the angel against the land of Meroz. In this the hour of wrath upon Elizabeth and her partakers," he exclaims, "fight not against the souls of your ancestors and the salvation of your wives and children. Fight rather for God's Church and the honour of England's knight-hood. Fight for Christ, for religion, and for the holy sacraments of our faith. The prayers of all Christian people, the blood of the martyred bishops, friars, priests, and laymen shed in this your land,

¹ *State Papers Domestic*. Edited by R. Lemon. May 11, 1588. "Rules and ordinances prescribed for the conduct and government of the King of Spain's army at sea."

² *Ibid.* June 24, 1588.

cry to God for your victory. The saints in heaven are interceding for you. The priests on earth stretch forth their consecrated hands night and day for you. Our Saviour Himself is among you in the blessed Sacrament. Fear not."

This disloyal rhodomontade was freely circulated throughout England, but made few converts. However zealous certain Englishmen might be in the cause of the Catholic Church, their first thoughts were concerned for the safety of their country, and their blood grew hot at the prospect of an invasion in the name of religion, which was to transform their island into a Spanish dependency. Whilst as for the rest of the nation, it was animated by the keenest hatred and indignation, and only too eager to meet the foe and crush his daring hopes. "The Spanish enterprise," wrote Walsyngham,¹ "puts England to some trouble and charges, but truly we fear it not; for they shall find us so resolute and prepared, that the good fellows who come shall have small cause to thank my Lord Cardinal for setting them on so hot a piece of service. The King of Spain must seek preferment elsewhere for his misbegotten brood, for England will not bear them." In spite of all the care and secrecy with which Philip during the last three years had been maturing and carrying out his hostile designs, the Council at Whitehall had been well posted up as to his movements. Spies, agents, and bribed informers had been busy on the quays of the Spanish and Portuguese ports, and had sent home the results of their observations. Hastening from Lisbon to Dartmouth, one Walker Squior burned to impart the intelligence he had obtained. "Warlike preparations," he said, "were being carried out at Lisbon for some great enterprise against England; at anchor in the harbour were 80 sail of hulks, from 100 to 800 tons each; 20 galleons, of 300 and 500 tons; and 40 sail of Biscay ships, from 100 to 500 tons each; whilst quartered in and about Lisbon were 30,000 Germans, 20,000 Italians sent by the Pope, 5,000 Spaniards, and 7,000 Portuguese, all destined for the invasion of England."² Two months later Walsyngham was informed that the King of Spain was increasing his fleet and land forces from various parts, and laying in "immense quantities of grain, wine, and military stores."³ Early in the following year Roger Ashton stated that "the King of Spain has 100,000 men and victuals in readiness at Lisbon; what will follow, God knows."⁴ The next month Drake, who by his capturing and burning Spanish ships and galleys had given Philip "such a cooling as never had happened to him since he was king," wrote to

¹ *State Papers Domestic*, July 20, 1588.

² *Ibid.* Dec. 10, 1585.

³ *Ibid.* Feb. 4, 1586.

⁴ *Ibid.* March 29, 1587.

Secretary Wolley that "great preparations are making for the invasion of England," and that he intended to intercept the Spanish fleet coming out of the Straits before it joined the king's forces.¹ He, however, urged the Secretary to prepare for the worst. Spies, captains of merchant vessels, foreign sailors, pilots, all re-echoed the advice of Drake, and bade England keep a sharp look-out, and not be taken at a disadvantage. One ship coming from Lisbon, we learn, had its master and certain of the crew taken and racked to give information.²

This intelligence was not disregarded, though the peculiar views of the queen prevented it from being acted upon in the thorough and decided manner such an emergency required. The Armada did not turn her bows towards England until the July of 1588, though she had been timed to start in the autumn of the previous year. Various causes had, however, hindered the departure of the expedition from the Tagus. When the fleet had been ready to sail, the troops under Parma had not been ready to embark; then there had been delays awaiting the result of certain diplomatic negotiations; nor had the weather been propitious for a vast fleet to encounter the heavy seas of the Atlantic; and finally, when all had been prepared, and orders were about to be issued to weigh anchor, Santa Cruz, the commander of the expedition, suddenly died, and further delays ensued on the appointment of Medina Sidonia as his successor. These continued postponements were of the greatest service to England. The few ships which then constituted her navy were put into commission. Privateers were requisitioned as auxiliaries. The best vessels belonging to our merchant fleet were armed, and instructions despatched to Lord Howard of Effingham "to take the ships into the Channel to defend the realm against the Spaniards." But now, in this grave hour of England's need, the contemptible meanness which was the most conspicuous fault in the character of Elizabeth became painfully apparent. Her courage was high, and her conduct splendid in stimulating her people to resist the foe; but, unhappily, she was desirous of defending her realm on the cheapest terms. Every vessel in the fleet was worked short-handed. The provisions supplied to the seamen were cut down to starving point; since "every man's victual of beef standeth her Majesty four pence the day," it was proposed to alter "that kind of victual to fish, oil, and peas." There were no provisions in store, and the men, supplied from a distance with small quantities at a time, were often for days almost without food. "Such a thing was never heard of, since there

¹ *State Papers Domestic*, April 27, 1587.

² *Ibid.* April 30, 1588.

were ships in England," writes Howard to Burghley,¹ "as no victuals in store. King Harry, her Majesty's father, never made a less supply than six weeks, and yet there was marvellous help upon extremity, for there was ever provision at Portsmouth, and also at Dover store ever at hand upon necessity." The pay of the men was in arrears, there was even a lack of powder ; and on the slightest rumour of the abandonment of the project of the Armada, the queen, in whose hands all the details of management lay, gave orders, to the intense anger and indignation of the captains in command, for the instant reduction of the fleet. "What did move her Majesty," writes Howard to Walsyngham,² "to diminish our forces on the sudden I know not. If anything be attempted now upon the sudden, either for Scotland or to invade this coast, we shall do as much good for the service as the hoys which lie at Lyon quay. There is no master in England that will undertake with these men that are now in them to carry the ships back to Chatham. Our state is well known in Flanders, and as we were a terror to them at our first coming out, so now they make little reckoning of us. They know that we are like bears tied to stakes, and they may come as dogs to offend us, and we cannot hurt them."

When, however, it became definitely known that the long-expected Armada was in full sail for our shores, and that peace was out of the question, the queen took less upon herself, and entrusted the management of affairs to her Council. And now all was activity and preparation, though, as we shall see, the supply of provisions to the fleet still left much to be desired. Every shire in the kingdom was instructed to make its preparations for resistance. The fortifications of Portsmouth were strengthened ; "for," writes Lord Sussex to Burghley,³ "at the queen's coronation I durst not shoot off one piece, the tower was so old and rotten." The maritime counties called out their men, and marched them down to the coast, to defend the ports where it was expected the enemy might land ; at Falmouth 11,000 men were drawn up, at Plymouth 17,000, at Portsmouth 16,000, and at Harwich 17,000. The Earl of Pembroke, as Lord President of Wales, was bidden to repair to Milford Haven, "to be in readiness to defend that haven, which from its depth and commodiousness might be selected for the descent of the Spaniards." A mandate was issued by the queen, addressed to all the leading peers, "declaring the necessity for speedily putting the realm in a posture of defence to resist the attempts of Spain, and relying upon

¹ *State Papers Domestic*, April 8, 1588.

² *Ibid.* Feb. 1, 1588.

³ *Ibid.* Nov. 30, 1587.

their lordships to put themselves in readiness to attend upon her person with such a convenient number of lances and light horse as may stand with their abilities." In every county the cavalry and trained men were called out by the lord lieutenant, whilst the deputy lieutenants were instructed to make an inventory of the arms and ammunition required. The forts on the south and east coast were strongly garrisoned. Orders were despatched to the inland counties to furnish an army for the special defence of the royal person. Private individuals were asked by the queen or the Council to contribute men and armour "towards resisting the foreign attempts against this realm, their natural and sweet country." Lord Morley agreed to raise twenty light horse, thirty muskets, and seventy calivers at his own expense, "though my estate at this present, owing to my father's fond departure, has been very much reduced." Lord Dacre wrote, "I can bring into the field, ready furnished for defence of her Majesty's person, ten lances, ten light horse, ten petronels, forty corslets, twenty muskets, and twenty calivers, and am right sorry that my ability is so weakened by long suits in law that I cannot do more." Lord Sandys, in spite of his "embarrassed circumstances," expressed himself ready to bring into the field, "for the defence of the queen, himself and household servants, to the number of ten horses and geldings furnished in armour of proof." Even the aged Shrewsbury wrote to the queen, offering his services to resist the invasion: "Though I am old, yet your Majesty's quarrel shall make me young again; though lame in body, yet lusty in heart to lend your greatest enemy one blow, to live and die in your service." Their patriotic example had numerous imitators. Peers and country gentlemen readily responded to the call, and many crippled their estates to prove the ardour of their loyalty. It was the especial duty of the clergy to furnish horse and armour. Thus, with her fleet standing out to sea, her troops drawn up upon the beach, her home counties well supplied with reserve forces, her forts strongly guarded, and keeping strict watch, England was ready to welcome the invader.¹

From the letters of the Lord Admiral, who, on board the *Ark Raleigh* at anchor off Plymouth, was keenly watching the approach of the enemy, we see the difficulties he had to contend with, and how he was employing his time. A brief summary of their contents will serve as a diary during this anxious interval:—

May 28. *To Lord Burghley*.—The ships with provisions have not been sent. Only 18 days' victuals on board. The sheriffs of Devonshire send word that the Spanish fleet is ready to come out with the first wind. Will sail to meet them

¹ *State Papers Domestic*, June and July, 1588.

as soon as the wind permits. Go out he will, though he should starve. Beseeches Burghley to hasten the provisions, for if the wind hold as it is but for six days the Spaniards will be knocking at our doors. With the gallantest company of captains, soldiers, and mariners ever seen in England, it were pity they should lack meat.

June 13. *To Walsyngham*.—Can do no good with the wind, as it is in the west, and blows so hard that only the largest ships dare ride in the Sound. Such weather was never seen at this time of the year. Their victuals will be out on Saturday, and no new supplies have arrived. The men behave admirably; none have mutinied, though all know they are short of provisions. Kindly handled, they will bear want, and run through fire and water. Intelligence that the fleet is off the rock.

June 14. *To the same*.—Have had three days' continued storm, and have "daunced as lustily as the gallantest dauncers in the Courte."

June 19. *To the same*.—On every question of moment consults Sir F. Drake, Lord Thomas Howard, Lord Sheffield, Sir Roger Williams, Hawkins, Frobisher, and Fanner as a council of war. For the love of God, let not the queen think now of charges. Hope that if he fall in service, her Majesty will let Lady Howard have the keeping of Hampton Court or Oatlands, as he shall not leave her "so well off as so good a wife doth deserve."

June 23. *To the Queen*.—Has several times put to sea, but been driven back by the wind to Plymouth. Their victuals have arrived, and hopes to sail to-morrow morning. Hears that the Spanish fleet has been scattered by the storm, and hopes to meet with them off the coast of France. Implores her, for the love of Jesus Christ, to awaken thoroughly, and to see the villanous treasons round about her.

July 6. *To Walsyngham*.—Part of the Spanish fleet has been discovered off the Scilly Isles, but has been dispersed by the stormy weather. Has divided his fleet into three sections—himself in mid-channel, Drake off Ushant, and Hawkins towards Scilly.

July 13. *To the same*.—Boats of all sorts have been sent from time to time to discover the Spanish fleet, but the foul weather has prevented them from making the coast of Spain. Prays God to preserve the fleet from sickness, for they fear that more than any hurts the Spaniards can do them.

July 17. *To the same*.—Obliged to put in for water, but neither sickness nor death shall delay them. Never saw nobler minds than are now in Plymouth. ¹

Late in the evening of July 19 the towering hulls of the Armada rounded the Lizard. The shores of England were before the Spaniards, and the object of their ambition was about to be attained. At last the weary months passed in busy preparation, the anxious nights spent amid the storms of the Atlantic, the fatigues and privations that had been endured, were now to receive their reward. The spirits of the men on board the galleons rose high, for all were convinced that success was about to crown their efforts. The moment had arrived when vengeance was to be theirs. Within sight was the England who had shown herself on every occasion the enemy of Spain—who had encouraged the Protestant revolt in the Low Countries, who had robbed the West Indies of their treasures, who

¹ *State Papers Domestic*, 1588.

had captured wealthy galleons bound for Cadiz or Lisbon, and brought them in triumph to the mouth of the Thames; whose famous mariners had, within the very fortifications which commanded the Spanish ports, fallen upon the fleets of the most catholic king, plundered them of their goods, and then left them a mass of wrecked timber. But the hour of revenge was at hand, and haughty England, who styled herself the mistress of the seas, was to be humbled on her own element, and yield her lands to the foreigner. Forming his ships in the shape of a crescent, which stretched some seven miles from horn to horn, Medina Sidonia came full sail towards Plymouth. Hastily weighing anchor, Lord Howard hurried out of the harbour to give battle to the enemy in the Channel.

Meanwhile the beacon-lights had flashed throughout the country the news of the arrival of the Armada. In every shire men were looking up their arms and saddling their horses ready for any emergency. Shipping was placed at the Nore to protect both Sheppey and the Thames. A camp was formed at Tilbury to cover London; and the Earl of Leicester, who had shown himself both incompetent and improvident in the Low Countries, and who owed all his advancement to the favour in which he was held by the queen, was appointed commander-in-chief. The hour of danger, however, stimulated him to unwonted activity. "Nothing must be neglected," he wrote to the Council, "to oppose this mighty enemy now knocking at our gates." The queen herself came down to the camp, rode along the lines, and exhorted her troops to remember their duty to their country and their religion. She avowed it as her intention, though a woman, to lead them herself against the enemy, and perish in battle rather than survive the ruin and slavery of her people. The soldiers, however, required little pressing to go forth and attack the enemy. They burned to meet the foe who had the audacity to attempt the invasion of their country, and to dream of forcing upon Protestant England the hated creed of Rome. Stories of the terrors of the Inquisition, of the cruelties that had been practised by Alva in the Low Countries, of the fate that was to be in store for Englishmen should the forces of Medina and Parma win the day, were freely circulated, and goaded the patriotism of the country into a perfect frenzy of wild and vindictive hate. Whatever the result might be, it was evident that England would only part with all that she held most dear at the price of her very life. "They are as gallant and willing men as ever were seen," writes Leicester of the troops massed together at Tilbury. To the commander-in-chief—"a mere treacherous minion," as the renegade Allen plainly styled him—Elizabeth entrusted the entire

management of all military details, and she accordingly wrote to him asking for advice, and the course she ought to pursue. Leicester—in his correspondence he signs himself Leycester—thus replies to his “most dere and gracious Lady.”¹ It is true, he says, that the enemies that approach her kingdom are her undeserved foes, yet neither their malice nor their forces need inspire fear, “for there is a most just God that beholdeth the innocency of your heart; and the cause you are assailed for is His, and His Church’s, and He never failed any that faithfully do put their chief trust in His goodness.” Since she has asked for his counsel, he feels it his duty to advise her to gather her army about her in the strongest manner possible, to have it officered by the oldest and best assured captains, and to place in the position of supreme command “some special nobleman.” Then as to herself. “And now for your person, being the most dainty and sacred thing we have in this world to care for, much more for advice to be given for the direction of it, a man must tremble when he thinks of it, especially finding your Majesty to have the princely courage to transport yourself to the uttermost confines of your realm, to meet your enemies and to defend your subjects. I cannot, most dere queen, consent to that, for upon your welfare consists the security of the whole kingdom.” Accordingly he recommends her to go to her house at Havering, with the army round about her there; but should she wish to spend two or three days at the camp, she can rest “in your poor lieutenant’s cabin; thus far, but no further, can I consent to adventure your person.” As for her gracious favour to him, continues Leicester, “I can only yield the like sacrifice I owe to God, which is a thankful heart, and to offer my body, life, and all to do your service.” His advice was accepted, and the queen retired to Havering; there she was surrounded by a picked army, officered by Sir Wm. Hatton, Sir Wm. Knolles, Sir Francis Knollys, Sir John Smith, Sir Thomas Cecil, Sir Edmund Cary, Sir John Peyton, Sir Henry Goodyer, Sir Edw. Winkfield, with the Lord Chamberlain at the head.

Shortly after her retirement Elizabeth wrote to Leicester that she intended paying him a visit at Tilbury to see the camp. The commander-in-chief was delighted at the proposal. It was news, he said, that pleased him most next “the well-doing of your sacred person.” He urged his “good sweet queen” not to alter her purpose if God gave her health, and assured her that the lodging he had prepared for her was “a proper sweet cleanly house,” within a little mile of the camp, and that her person would be as sure there as at

¹ *State Papers Domestic*, July 27, 1588.

St. James's.¹ The favourite was, however, to indite no more letters to his "good sweet queen." The marshy soil of Tilbury had caused much sickness in the camp, and Leicester, as soon as all fears of a Spanish invasion were at an end, was meditating a visit to Bath, to be cured of the low fever which was then hanging over him. He wrote to Elizabeth, "from her old lodging at Rycott," inquiring after her health, "the chiefest thing in this world I pray for;" and informing her that he still continued her medicine, as it had done him more good than any other. He hoped, however, he said, to be perfectly cured at "the Bath," and concluded by praying for her happy preservation, and humbly kissing her feet. His hopes were not to be granted, for he died early in September, on his way to Kenilworth. His letter is dated August 29, and addressed "To y^e Q. most excellent Ma^{ty}." Beneath the address Elizabeth has written in her own handwriting the pathetic remark, "His last letter."²

Into the oft-told story of the overthrow of the Armada, except as it is illustrated by fresh revelations from the "State Papers," we shall not enter. On issuing from Plymouth harbour into the open Channel, Lord Howard gave orders to his men not to come to close quarters with the towering unwieldy galleons, but to pour broadside after broadside into them at a distance, and to bide their opportunity to fall upon them. They had not long to wait. One of the galleons, the *Capitana*, carrying the flag of Pedro de Valdez, ran foul of the *Santa Catalina*, and broke her bowsprit. She was disabled; it was in vain that the Spaniards tried to take her in tow, and Drake timely coming up, she struck her flag and was tugged, at the stern of the *Revenge*, a prize into Torbay. Among the prisoners was De Valdez, "the third in command of the fleet," and Joan Martinez de Recaldo, vice-admiral.³ As the Armada advanced up the Channel the English hung upon its rear, firing shot after shot into the lofty hulls of its galleons and galleasses, yet all the while taking excellent care to give them a wide berth. "The enemy pursue me," moans Medina Sidonia; "they fire upon me most days from morning till nightfall; but they will not close and grapple. I have purposely left ships exposed to tempt them to board, but they decline to do it, and there is no remedy, for they are swift and we are slow." The Spanish captain-general was fairly nonplussed. The smart, well-handled English ships ran in and out, doing him as much damage as it was possible, always declining to come to close quarters, whilst his lumbering craft were useless to chase and cripple the agile enemy.

¹ *State Papers Domestic*, Aug. 5, 1588.

² *Ibid.* Aug. 29, 1588.

³ *Ibid.* July 23, 1588.

Medina resolved to bear up for Calais, in the hope that Parma was ready to put to sea. Shortly after the galleons had anchored in Calais roads, Lord Howard, whose ammunition and provision, owing to the short-sighted stinginess of Elizabeth, were running terribly low, and who, consequently, was most anxious not to protract proceedings, practised a successful ruse upon the Spaniards. Filling certain of his smaller ships with combustible materials, he despatched them one after the other into the midst of the enemy. The Spaniards, panic-stricken, cut their cables, and, utterly demoralised, took to flight in all speed. The next morning Howard, seizing the opportunity of their confusion, fell upon them, and destroyed about a dozen of their ships, besides inflicting considerable damage upon their fleet generally. "On Sunday at midnight," writes one Tomson to Walsyngham,¹ "the admiral, having the wind, sent certain ships on fire amongst the enemy, who in great confusion slipped their cables, ran foul of each other, and ran out to sea, pursued by the English. Out of 124 that anchored off Calais, only 86 can be found." One of the galleasses having got ashore, the English rowed towards her, intending to make her their prize; but after a desperate fight, in which the crew were supported by the French, they were beaten off, and had to make a speedy retreat. It was now evident to the most ardent Spaniard that the object of the expedition was completely frustrated. The Duke of Parma declined to quit the harbour to land his forces in England unless protected by the Spanish fleet, and the Armada was now flying northwards for dear life, intent far more upon seeing the coast of Spain than that of England. "God grant ye have a good eye to the Duke of Parma," writes Drake cheerily to Walsyngham,² "for with the grace of God, if we live, I doubt not ere it be long so to handle the matter with the Duke of Sidonia as he shall wish himself at St. Mary Port among his orange-trees." The Duke must have already wished himself among his orange-trees. Nervous and confused by the complete collapse of the expedition, he knew not what course to pursue. He dared not return home by the Channel, for his men refused to encounter the English again in the narrow seas; and so, after an anxious parliament with his lieutenants, it was resolved to seek Spain by way of the North Sea.³ Crowding

¹ *State Papers, Domestic*, July 30, 1588.

² *Ibid.* July 31, 1588.

³ *State Papers, Ireland*, edited by H. C. Hamilton. Enclosed to Burghley by Lord Deputy, Oct., 1, 1588. Directions of the Duke Medina. "The course t is first to be held is to the N.N.E., until you be found under 61½ degrees; I then take great heed lest you fall upon the island of Ireland, for fear of the

all sail, and throwing overboard all useless cargo, the Armada steered for the Orkneys. Howard, however, had no intention of seeing the hostile fleet sneak off like a whipped cur without receiving the full punishment she so richly deserved. Leaving Lord Henry Seymour's squadron to guard "the narrow seas," the English admiral gave chase to the Spaniard. But English courage, though capable of great efforts, requires to be supplied with the ordinary means of subsistence. A stern chase is proverbially a long chase, but it becomes infinitely longer when the crews in pursuit are decimated by scurvy and dysentery, are weakened by absolute hunger, are in want of water, and are only animated by the undying pluck of their race. Sadder reading there is not than the piteous moans for provisions to be met with in the State Papers of this date from the captains of the different men-of-war then watching the Channel for the protection of England. Wages were in arrears, every farthing of extra expenditure had to be rigidly accounted for to the queen, whilst sailors brought on shore sick or dying had no place to receive them. "It would grieve any man's heart," writes Howard, "to see men who had served so valiantly die so miserably." Yet Elizabeth, who owed her realm to the efforts of these her gallant subjects, though she could speak brave words to them which stirred their blood like a trumpet, would permit no lavish encroachments upon her exchequer. She doled out in miserable portions money, food, drink, and clothes. Even her cherished favourite Leicester had to complain that on 4,000 men coming into Tilbury after a twenty-miles march, "as forward and willing men as ever I saw," there was not "a barrel of beer nor a loaf of bread" to give them.¹ The one cry throughout the correspondence of this period is, "Nothing can exceed the patient and willing spirit of both sailors and soldiers; but for God's sake send us provisions, send us powder, send us money, clothes, and drink, else we be too enfeebled to fight." Still, the miserable parsimony of the queen was deaf to all entreaties, in spite of Drake's advice that it was an ill policy "to hazard a kingdom with saving a little charge."

The result of all this cheese-paring was now to tell its tale. Off Norfolk a storm arose: the men under Howard in pursuit of the Armada were too weak to work the ships—the Admiral himself was

harm that may happen unto you upon that coast. Then parting from those islands, and doubling the Cape in 61½ degrees, you shall run W.S.W. until you be found under 58 degrees, and thence to S.W. to the height of 53 degrees, and then to S.S.W., making to Cape Finisterre, and so to the Groin [Corunna]."

¹ *State Papers Domestic*, July 26, 1588.

compelled to satisfy the pangs of hunger with a few coarse beans, whilst the crews were forced for drink—the story can hardly be credited—to fall back upon the resources of human nature,¹ and the chase had to be abandoned. With extreme difficulty Howard, accompanied by the largest of his ships, reached Margate: the rest of the fleet were driven into Harwich. “Our parsimony at home,” writes Captain Whyte to Walsyngham,² “hath bereaved us of the famousest victory that ever our nation had at sea.” Upon his return home the admiral sent to Walsyngham³ the following brief diary of the events that had occurred whilst the English fleet was under his command :—

July 19, Friday.—Upon Friday, being the 19th of the present month, part of the Spanish navy, to the number of fifty sail, were discovered about the isles of Scilly, hovering in the wind, as it seemed, to attend the rest of the fleet; and the next day, at three of the clock in the afternoon, the Lord Admiral got forth with our navy out of Plymouth, though with some difficulty, the wind being at south-west. Notwithstanding, through the great travail used by our men, they not only cleared the harbour, but also, the next day being Sunday, about nine of the clock in the morning, recovered the wind of the whole fleet, which being thoroughly descried was found to consist of 120 sail great and small.

At the same instant the Lord Admiral gave them fight within the view of Plymouth, from whence the Mayor with others sent them continually supplies of men till they were past their coast. This fight continued till one of the clock the same day, wherein the enemy was made to bear room with some of his ships to stop their leaks. The same day, by an accident of fire happening in one of their great ships of the burden of [1,200] tons, they were blown up with powder, about 120 men, the rest being compelled to leave her, and so she was by the Lord Admiral sent into the west part of England.

July 22, Monday.—Upon Monday, the 22nd, one of the chief galleons, wherein was Don Pedro de Valdez with 450 men, was taken by reason of his mast that was spent with the breaking of his bowsprit, so as he presently yielded with sundry gentlemen of good quality.

July 23, Tuesday.—On Tuesday, the 23rd, the Lord Admiral charging the enemy, who had then gotten some advantage of the wind, and thereupon seemed more desirous to abide our force than before, fell in fight with them over against St. Alban's, about five of the clock in the morning, the wind being at north-east, and so continued with great force on both sides till late in the evening, when the wind coming again to be south-west and somewhat large, they began to go homeward.

July 24, Wednesday.—The same night and all Wednesday the Lord Admiral kept very near unto the Spanish fleet.

July 25, Thursday.—Upon Thursday, the 25th, over against Dunnose, part of the Isle of Wight, the Lord Admiral espying Captain Frobisher with a few other ships to be in a sharp fight with the enemy, and fearing they should be distressed, did with five of his best ships bear up toward the admiral of the Spanish fleet, and so breaking into the heart of them began a very sharp fight, being within

¹ *State Papers Domestic*, Aug. 9, 1588.

² *Ibid.* Aug. 8, 1588.

³ *Ibid.* Aug. 7, 1588.

two or three score one of the other, until they had cleared Captain Frobisher and made them give place.

July 26, Friday.—The next day being the 26th, the Lord Admiral only continued his pursuit of the enemy, having still increased his provisions, and keeping the wind of them.

July 27, Saturday.—Upon Saturday, the 27th, about eight of the clock at night, the Lord Henry Seymour, admiral in the narrow seas, joined with the Lord Admiral in Whitsand Bay, over against the cliff of Calais, and anchored together, and the Spanish fleet rode also at anchor to leeward of the Lord Admiral, and nearer to Calais roads.

July 28, Sunday.—The 28th, the Lord Admiral prepared seven ships fitted with pitch, tar, and other necessities for the burning of some of the enemy's fleet; and at eleven of the clock at night, the wind and tide serving, put the stratagem into execution, the event whereof was this:—

July 29, Monday.—Upon Monday, the 29th, early in the morning, the admiral of the galleasses riding next to our fleet, let slip her anchor and cable to avoid the fires, and driving thwart another galleass, her cable took hold of the other rudder and broke it clean away, so that with her oars she was fain to get into Calais roads for relief. All the rest of the Spanish fleet either cut or let slip their anchors and cables, set sail, and put to the sea, being chased from that road.

After this the Lord Admiral sent the lieutenant of his own ship with 100 of his principal men in a long-boat to recover the galleass so distressed near Calais, who, after some sharp fight with the loss of some men, was possessed of her, and having slain a great number of the enemy, namely their captain-general of the four galleasses, called Don Hugo de Montcaldo, son to the Viceroy of Valencia, and divers gentlemen of good reckoning, carried prisoners to the English fleet.

In this pursuit of the fire-works by our force, the Lord Admiral in fight spoiled a great number of them, sunk three, and drove four or five on the shore, so as at that time it was assured that they had lost at the least sixteen of their best ships. The same day after the fight the Lord Admiral followed the enemy in chase, the wind continuing at west and south-west, who bearing room northwards directly towards the isles of Scotland, were by his lordship followed near hand, until they brought themselves within the height of 55 degrees.

The naval captains lying idle in the harbours of Margate, Harwich, and Plymouth, with their ships dismantled and their crews reduced, were loud in their complaints that the enemy had been permitted to escape them. They cursed the wretched parsimony of their sovereign, which had been the sole cause of their vessels being sent to sea short-handed and unprovisioned, thus rendering them unable to avail themselves to the full of the advantages of victory. Yet the Spanish seamen had little cause to congratulate themselves upon seeing no longer the English fleet hanging upon their rear. Storms and sickness, as they sailed northwards seeking the open ocean to effect their return, had punished the Spaniards far more severely than ever would have been within the power of Howard's guns and fireships. Ship after ship, the sport of the raging tempest,

and manned by an exhausted crew, was driven a wreck upon the ironbound coast. Around the Faroe Isles, the Orkneys, and the islands off the western shores of Scotland were strewn the timbers of the once mighty galleons of Spain. Their rich cargoes had perished in the waves ; most of the sailors had met with a watery grave ; whilst the few who had struggled to the shore were murdered in cold blood by the inhabitants, who dared not give them refuge. A small portion of the Armada had worked its way farther south ; but the western coast of Ireland failed to prove itself a whit more kind than the sister kingdom. From the bays of Donegal to Bantry there was the same story of wreck, plunder, and wholesale slaughter. Had the Spaniards been victorious, the native Irish would gladly have welcomed them on their island ; but fugitive and defeated, they showed them scant mercy, and handed them over to the English, who gave them no quarter. "The Irish," writes Sir George Carew, "were very doubtful before the victory was known to be her Majesty's ; but when they saw the great distress and weakness that the enemy was in, they did not only put as many as they could to the sword, but were ready with all their forces to attend the deputy in any service. The ancient love between Ireland and Spain is broken." Orders had been issued by Sir Richard Bingham, the Governor of Connaught, that all Spanish seamen driven on shore should be brought to Galway, and scouts were despatched to explore the coast-line to carry out these instructions. Day after day haggard and famished Spaniards were marched into Galway to be hanged or shot, whilst the same fate awaited their fellows in the counties of Sligo, Mayo, Clare, and Kerry. As the towering hull of a crippled galleon was seen dashed against the rocks which form the fringe of that terrible western coast, the savage Irish leaped down upon the beach, clubbed the defenceless crew, and stole all that they could lay their greedy hands upon.

From the Irish State Papers we learn how merciless was the punishment dealt out to the unhappy Spaniard who found himself a castaway upon the shores of the Emerald Isle—shipwreck and slaughter are almost in every despatch forwarded to London at this time. Let us cull a few extracts.

"The miseries they sustained upon this coast," writes Sir George Carew,¹ "are to be pitied in any but Spaniards. Of those who came to the land by swimming, or enforced thereto by famine, very near 3,000 were slain, besides about 2,000 drowned between Lough Foyle

11 Dingle." "That intelligence sent me from my brother George,"
m to the Lord Deputy,² "that the 700 Spaniards in

¹ *Ireland*, Sept. 18, 1588.

² *Ibid.* Sept. 21, 1588.

Ulster were despatched; and this I dare assure your Lordship now, that in some fifteen or sixteen ships cast away on the coast of this province, which I can in mine own knowledge say to be so many, there hath perished at the least some 6,000 or 7,000 men, of which there have been put to the sword, first and last, by my brother George, and in Mayo, Thomond, and Galway, and executed, one way and another, about 700 or 800 or upwards." "At my late being at Sligo," writes Sir Geoffrey Fenton to Burghley,¹ "I found both by view of eye and credible report that the number of ships and men perished upon these coasts was more than was advertised thither by the Lord Deputy and Council, for I numbered in one strand of less than five miles in length eleven hundred dead corpses of men which the sea had driven upon the shore since the time of the advertisement. The country people told me the like was in other places, though not of like number." The Lord Deputy made a journey from Dublin to the west coast, and he thus communicates his impressions to the Council²:—"As I passed from Sligo," he writes, "having then gone 120 miles, I held on towards Bundroys, and so to Ballyshannon, the uttermost part of Connaught that way; and riding still along the sea-coast, I went to see the bay where some of those ships were wrecked, and where, as I heard, lay not long before twelve or thirteen hundred of the dead bodies. I rode along upon that strand near two miles (but left behind me a long mile and more), and then turned off from that shore; in both which places they said that had seen it there lay a great store of the timber of wrecked ships as was in that place which myself had viewed, being in mine opinion (having small skill or judgment therein) more than would have built five of the greatest ships that ever I saw, besides mighty great boats' cables, and other cordage answerable thereunto, and some such masts for bigness and length as, in mine own judgment, I never saw any two that could make the like." Well might the Lord Deputy exclaim, "God hath fought by shipwrecks, savages, and famine for her Majesty against the proud Spaniards!" Well might Medina Sidonia have warned his men to avoid Ireland, "for fear of the harm that may happen unto you upon that coast!"

Of the mighty fleet that had sailed forth from Lisbon, blessed by priest and prelate, to lay England low in the dust, and assert the supremacy of the Catholic faith, "only fifty-six ships escaped back to Spain, and they were so shaken by the English bullets and severe storms that some of them sank in the havens."³ Such was the end of

¹ *State Papers, Ireland*, Oct. 28, 1588.

² *Ibid.* Dec. 31, 1588.

³ *Ibid.* Exam. of John Brown, mariner, Feb. 11, 1588.

the Conquest, and the first time any attempt since the Conquest, to turn the English into conquerors and to then abandon, of the conquest of England. Three hundred years have passed since Edward Bruce, a wandering Irishman, landed on the coast of Ireland, and while the English monarchs were pained before with Spanish gallantry and valour, yet more and more plans for the subjection of the island were being brought forward by the foreigner, to the great encouragement of the natives within our midst. At one time we dreaded a French invasion; another a French invasion; whilst there are some who even at the present day, fear that our unprotected east coast may fall a prey to the greed of aggressive but impoverished Germany. Yet all such dismal forebodings have never been, and we are sure never will be, realised. Whoever be the enemy who builds his fleet and collects his forces for the conquest of England, he will find that history repeats itself with a terrible monotony; for assuredly the same punishment, varied perhaps in its details, but not the less deterrent and complete, will be dealt out to him as, in the days of Howard and of Drake, was dealt out to the Spaniard.

ALEX. CHARLES EWALD.

SOME ANIMAL BIOGRAPHIES AND THEIR LESSONS.

PART I.

ALLUSION has already been made in these pages to that most fundamental proposition of modern biology which maintains that "Community in development reveals community of descent." It has also been shown at length, that, in the eyes of modern naturalists, the development of an animal or plant is regarded as affording a clue to the manner of its evolution or descent from pre-existing forms. The formation of a living being to-day, in other words, repeats for us the formation of its race and species in time past. So that, once again to quote Darwin's words, "We can understand how it is that, in the eyes of most naturalists, the structure of the embryo is even more important for classification than that of the adult." Or, again, "embryology (or development) rises greatly in interest, when we look at the embryo as a picture, more or less obscured, of the progenitor, either in its adult or larval state, of all the members of the same great class." Second to none in interest, in the eyes of modern biologists, are the phenomena presented to them in the formation of the animal or the plant frame. In former years, the mystery of development was great indeed. There could be offered in the past decade of biology no reason—appealing sufficiently to the rational intellect as explanatory of the events in question—why a frog in its development should appear first as a gill-breathing fish, later on as a tailed newt-like creature, and ultimately as a tailless lung-breathing amphibian. Nor could natural historians in the past venture to account in more lucid fashion for the curious changes which a butterfly or beetle undergoes in its progress from the days of its youth towards the adult form, and from the stage of the crawling grub, through that of the quiescent chrysalis, to the full-fledged "imago" with its wings. Kirby and Spence summed up and dismissed such matters in a manner—unfortunately for the free play of intellectual vigour, not quite extinct in these latter days—which said much, perhaps, for faith, but little or nothing for reason and science. These famous entomologists held that insects passed

through a metamorphosis because "such is the will of the Creator"; and they supplement this "confession of faith" with an attempt at a scientific explanation by the further assertion that, insects being voracious in their feeding-habits, especially in earlier life, perform an important function in the economy of Nature in that they remove from the earth's surface "superabundant and decaying animal and vegetable matter." A further reason for this providential arrangement was given in the fact, that, as "unusual powers of multiplication" were indispensable for recruiting the ranks of the insect scavengers, and as nutrition and reproduction are incompatible functions, the removal of decaying matter during the youthful stages of the insect's life was to be regarded as a convenient subdivision of its labours, seeing that its adult existence is spent in the work of reproducing its race. But it might easily be shown that, whilst a goodly number of larval insects do feed upon carrion, a large proportion of the class does not exhibit any such habit; and it might reasonably enough be maintained that the argument of Kirby and Spence is open to the serious objection that, in its character, it tends to illustrate the *post hoc ergo propter hoc* fallacy. Decaying matter exists, therefore insects were designed to pass through a metamorphosis, and were gifted with voracity of disposition that they might remove the said matter from the earth's surface—a proposition vitiated in its exactitude by the fact just mentioned that many insects do not eat such matter; and also by the further facts that many do not undergo a metamorphosis at all; that many voracious caterpillars, instead of eating decaying matter, destroy our trees and flowers; and that many of Nature's scavengers of higher and lower rank than the insects do not pass through a series of changes in development, but grow, nourish themselves in the exercise of their sanitary work, and likewise, at the same time, and as adult forms, reproduce their species and continue their race in time. Clearly, then, the explanation of Kirby and Spence affords no satisfaction to the contemplative mind in the natural anxiety and desire to discover the causes of things. At its very best, such explanation leaves "the reason why" untouched; and conversely, it can well be understood how any other system of thought, which presents a more satisfactory method of accounting for the facts in question, should find ready acceptance as expanding and enlarging the thoughts of men.

In a former paper¹ we discussed the meaning of the remarkable likenesses which can be readily proved as matters of fact and obser-

¹ See article, "Animal Development and what it Teaches," *Gentleman's Magazine* for January 1880.

vation to exist between the early stages in the development of very different animals. A sponge, a sea-squirt, a lancelet, and even higher animals still, appear in the first beginnings of their existence to pursue a remarkably similar course; each form parting company with its fellows at a given stage on the way of development, and thereafter passing by the special pathway of its race towards the adult and perfect stage. Von Baer's axiom that development proceeds from the general to the special, thus declares a great truth of nature. Modern biology appears provided with a host of witnesses to the truth of that axiom, and supplies a reason for the likeness by assuming similarity of descent from lower life as the explanation of those common and general beginnings from which the special and varied forms of animals and plants are evolved every hour around us. The axiom that the development of the individual (*ontogenesis*) is the rapid shifting or panoramic recapitulation of the development of the species (*phylogenesis*) is now regarded in biology as the keynote of the whole study of animal and plant formation. If we find, for instance, that the frog in its development is firstly a fish, then a tailed amphibian or newt, and, last of all, a tailless, air-breathing frog, we see in such a panoramic succession of changes—the development of the individual—the evolution and development of the frog race. We read such a history as showing us clearly enough that the frogs have been evolved from some ancient fish-stock, that this fish ancestor became through succeeding modifications a tailed newt-like amphibian, and finally that the newt in turn became the higher frog. Most reasonable is the supposition and belief that, if the living hosts have descended from common ancestors, the appearance of ancestral features in their development is a most natural expectation and a highly natural law of life. That transmission from parent to offspring of hereditary features, so familiar to us in human existence—the reproduction of family features by the successive descendants of the family stock—is, in truth, but the repetition in higher life of the likenesses to its ancient ancestry we see in the developing frog. On such grounds we may attempt successfully to explain the mysteries of development; and on such a principle, we may note in passing, it is easy to see how important a guide to the classification and arrangement of living beings their development affords. If those animals which are descended from a common ancestry resemble each other in their development, such resemblances may be held to represent the truest of those relationships which it is the business and aim of classification to express.

The chronicle of the development of animal life is, however, not completed when the earliest changes seen in the formation of the

animal frames have been noted. Long after the common and earliest stages, described in the former paper, have been completed, there may be produced before us marvellous resemblances and likenesses between animals which, when adult, would seem to possess no community either of origin or of other relationship. It is to these later changes in the animal form that we now purpose to direct attention. The history of those changes which more immediately precede the assumption of adult life, affords as valuable evidence of the evolution of species as does the chronicle of the very beginnings of existence. It is only needful to point out at the commencement of such a study, that admittedly the panoramic views of evolution we are about to discuss frequently present breaks and gaps in their succession. The expanding canvas of life here and there exhibits a blank surface, due to the erasure of the picture which, we believe, formerly existed thereon. There exists a second principle in nature and evolution, of equal importance to heredity or that in virtue of which the likeness of the parent or ancestors is transmitted to the offspring or descendants. This second principle is that of "modification" by adaptation to surrounding or varying conditions. The living being is a plastic unit, capable of being affected and impressed in various and often undetermined fashions by the forces of the world in which it lives. Such external conditions—heat and cold, food, habitat, and a host of other circumstances—influence its development in the present, as unquestionably in the past they have modified the history of its race. In truth, the germ-idea of evolution is that of progressive change and alteration induced by the great factors—internal or innate hereditary and vital forces, and the external or outside circumstances of life. To the operation and influence, then, of surroundings, acting variously upon different natures and organisms, we rightly ascribe the deletion of stages we would naturally expect to meet with in that recapitulation of the animal evolution exhibited in its development. As the geological record, through its imperfections—due to the metamorphism and destruction of fossil-bearing rocks—causes grievous gaps in the history of past life on the earth, so the history and development of the life of to-day shows its blanks and imperfections likewise—these blanks caused chiefly, we believe, by the varying outward conditions under which the development of the race was carried out. Thus, if the main outlines of the development of the frog-race be plainly delineated, the pictures likewise may exhibit here but the dimmest possible contour, and may there show a blank. The original fish-ancestor of the race must be sought for amid the fossils—possibly it may never come to light at all. The successive stages whereby the tailed newt

became the frog, are barely outlined in the animal world of to-day, and are here and there wanting altogether. But the finger-posts exist nevertheless, and they guide our mental way satisfactorily enough, so long as we trust to their indications. Even though we have to wade through the high tides of difficulty and dimness of knowledge which obscure the intervening ground, we may walk with confidence in that sober path which is founded upon the reason that is attainable. As Huxley pertinently remarks in a recent manual of zoological instruction : " In practice, however, the reconstruction of the pedigree of a group from the developmental history of its existing members is fraught with difficulties. It is highly probable that the series of developmental stages of the individual organism never presents more than an abbreviated and condensed summary of ancestral conditions ; while this summary is often strangely modified by variation and adaptation to conditions ; and it must be confessed that, in most cases, we can do little better than guess what is genuine recapitulation of ancestral forms, and what is the effect of comparatively late adaptation. The only perfectly safe foundation for the doctrine of Evolution," continues Huxley, " lies in the historical, or rather archæological, evidence that particular organisms have arisen by the gradual modification of their predecessors, which is furnished by fossil remains. That evidence is daily increasing in amount and in weight ; and it is to be hoped that the comparison of the actual pedigree of these organisms with the phenomena of their development may furnish some criterion by which the validity of phylogenetic conclusions (or race-development), deduced from the facts of embryology alone, may be satisfactorily tested."

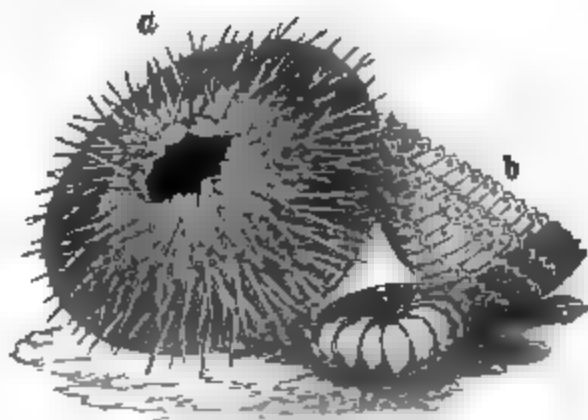


FIG. 1. SEA-URCHINS.

A survey of some typical groups of animals in relation to their development will provide us with satisfactory means of judging how far and how plainly the history of the individual repeats that of its race. Turning firstly to some fields of lower life, we may select the class (*Echinodermata*) represented by the Starfishes (Fig. 2), Sea-urchins (Fig. 1), Sea-lilies (or Crinoids) (Fig. 4), and Sea-cucumbers (Fig. 3), as a starting-point for our inquiries. There is little need that a list of zoological characters should be enumerated by way of impressing the idea of the varied appearance of the animals just mentioned. But it may be remarked that, firstly, they all exhibit a

fundamental likeness in structure, whilst they show diversity of form and, secondly, that such general or fundamental agreement is seen in the management of their internal organs—digestive system, heart, nervous system, &c., and especially in what zoologists term their “radial symmetry”—that is, their generally rounded form arising

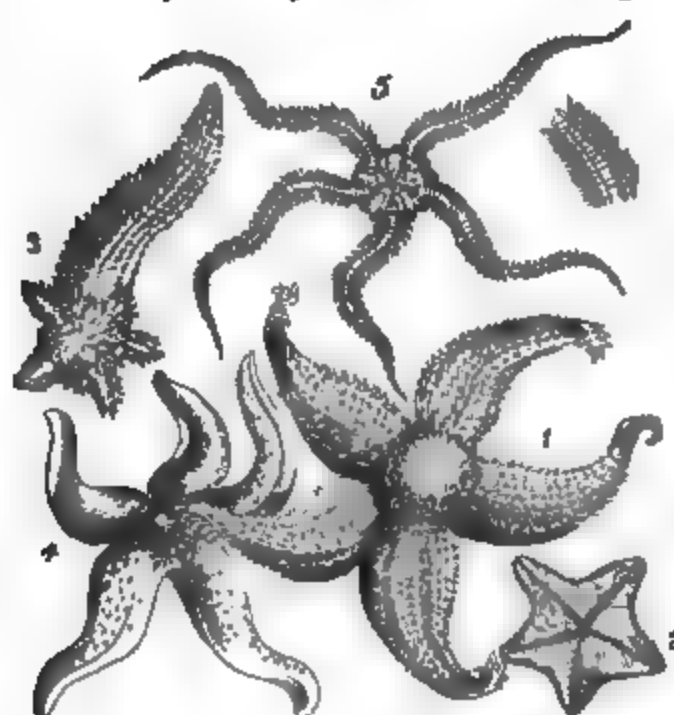


FIG. 2. STARFISHES.

from their bodily elements, so to speak, being moulded around a central point (Fig. 2), the mouth. However like these animals may be in general structure, they, at the same time, present us with very diverse forms. On the hypothesis of special creation, nothing could appear more rational than the idea that dissimilarity of form was due to the separate circumstances of their creation. But such an idea overlooks at the same time their general likeness in structure; and it certainly takes no account and gives no explanation of the singular uniformity and resemblances presented by these animals in early life. The general likeness in question, in fact, simply reiterates and strengthens the evidence and conclusions that the varied tribes of Starfishes, Sea-urchins, Crinoids, and Sea-cucumbers have arisen from a common ancestry. Let the history of their development prove the truth and validity of this conclusion.

Selecting a Starfish as the most familiar form of the class, we find its early development to exhibit those stages of egg-segmentation common to the developing ovum of all animals. But the special features of Starfish development soon begin to show themselves in the production of a worm-like organism, utterly different from the Starfish-

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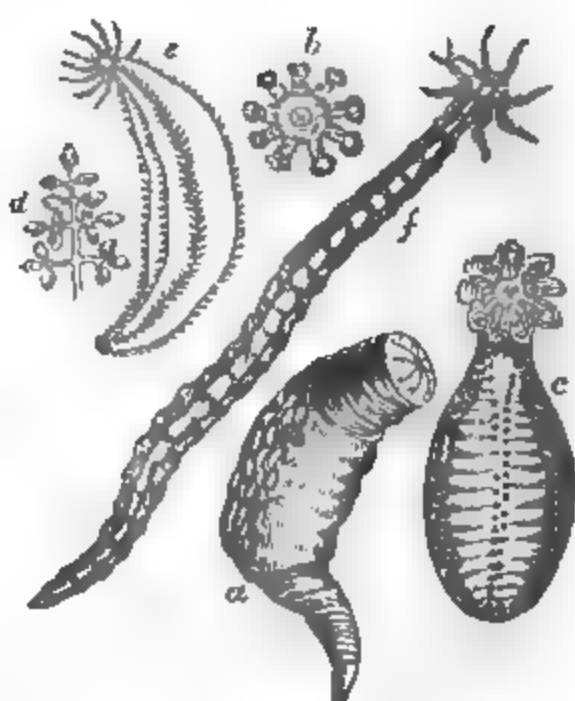


FIG. 3. SEA-CUCUMBERS.

form, and which swims freely in the sea by means of the delicate *cilia* or vibratile processes with which the sides of its body are provided. This larva possesses a digestive system, a system of water-tubes and other structures, and it would thus seem as if from the egg of the Starfish a wholly different progeny was destined to arise. So unlike is the young organism to the parent, that when first discovered it was described by Sars in 1835 as a hitherto unknown form under the name of *Bipinnaria* (Fig. 5, A.) In due time, however, a secondary formation begins to appear within this latter body (Fig. 5, B, *a b*), and the curious spectacle is beheld of the form of the young Starfish growing within and absorbing the materials of which the *Bipinnaria*-body is composed. So that when development is completed, the *Bipinnaria* has become appropriated by the new and secondary formation, which latter duly appears as the true Starfish, destined, after ordinary growth, to assume the adult form.



FIG. 4. CRINOID.

The study of a Sea-urchin's early life-history reveals a striking similarity to the development of a Starfish. The embryo Sea-

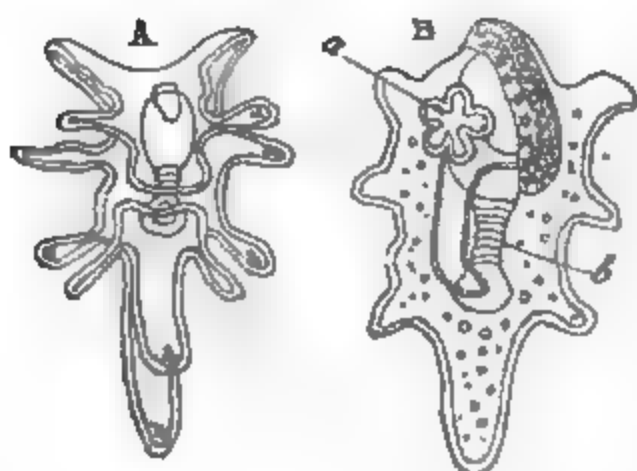


FIG. 5. LARVÆ OF STARFISH.

urchin, "in escaping from the egg" (Fig. 6, A B), says Agassiz, "resembles a Starfish embryo, and it would greatly puzzle any one to perceive any difference between them. The formation of the stomach of the œsophagus (or gullet), of the intestine, and of the water-tubes takes place in exactly the same manner as in the Starfish, the time only at which these different organs are differentiated not being the same." But at a later stage the young Sea-urchin develops a different phase and form from those of the Starfish. It appears as a curious body, shaped somewhat after the fashion of a painter's easel and formerly named

urchin, "in escaping from the egg" (Fig. 6, A B), says Agassiz, "resembles a Starfish embryo, and it would greatly puzzle any one to perceive any difference between them. The formation of the stomach of the œsophagus (or gullet), of the intestine, and of the water-

Pluteus (Fig. 6, c), under the idea that it represented an adult and distinct being. Within this *Pluteus* a skeleton of limy rods is developed, and a digestive system is also formed. Then succeed the final stages in development. The body of the *Pluteus* is absorbed by the future Sea-urchin (Fig. 6, d), which, as in the Starfish, is

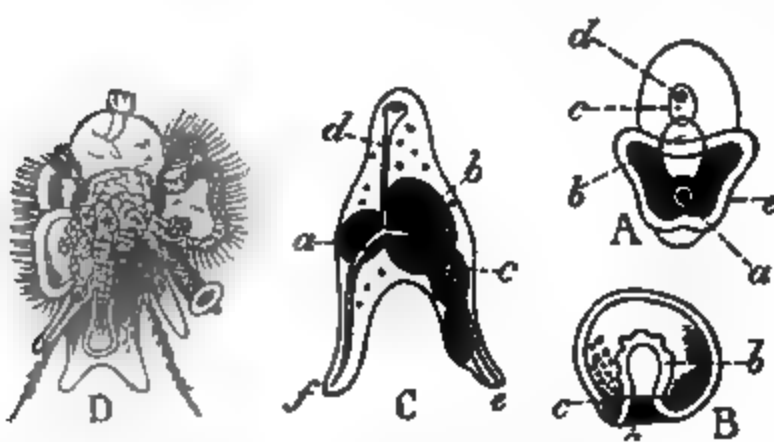


FIG. 6. DEVELOPMENT OF SEA-URCHIN.

formed within and from the substance of this larva—with this difference, that a portion of the *Pluteus* is generally cast off as useless material, whereas in the Starfish the whole larva was utilised in the

manufacture of the perfect form. There exists a second group of Starfishes, including the Brittle-stars and Sand-stars (Fig. 2, s), and exhibiting certain differences in structure from the common Starfishes of our sea-beaches. In their development these Sand-stars and their neighbours approach very nearly indeed to that of the Sea-urchins. Their larva is also a "*Pluteus*," and possesses a limy skeleton; and it is singular to find that forms so divergent in character as the Sand-starfishes and Sea-urchins should thus resemble each other in development. The interesting group of the Crinoids, or Sea-lilies (Fig. 4)—well known in a fossil state under the name of "*Encrinites*"—

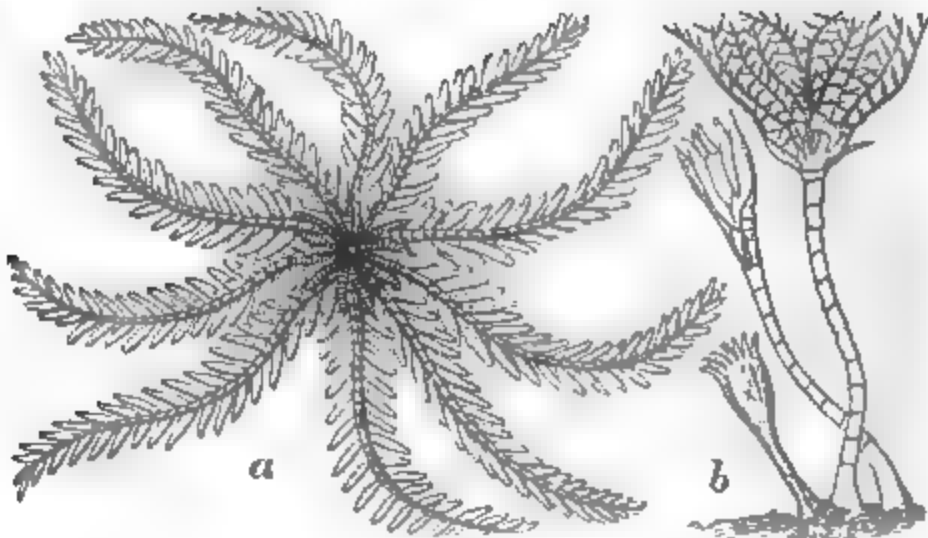


FIG. 7. ROSY FEATHER-STAR.

presents us with beings that may best be described as Star-fishes borne on stalks. There exists, however, a well-known free Crinoid in the shape of the *Comatula* (*Antedon*) *rosacea*, or the Rosy Feather-star of our coasts (Fig. 7); this form appearing in its adult condition

as a free, unattached "Starfish" (Fig. 7, *a*), but indubitably proving its Crinoid nature, in that it spends the early part of its existence in a stalked condition (*b*), resembling the permanent state of its neighbour Sea-lilies (Fig. 4). Now, in the development of the Crinoids we meet with an oval, free-swimming larva, within which a digestive system duly appears. This organism in due course attaches itself by a stalk, and the future Crinoid is developed within this larva; a new mouth and digestive apparatus are produced, and the adult stalked form is assumed. In the Rosy Feather-star such development, with its characteristic modifications, is well seen. Here we first see the oval larva, with its four bands of cilia (Fig. 8, *A*), and a tuft of these organs at the extremity. Then traces of the future adult (*B*) appear within this body. As development proceeds, the cup or body of the Crinoid is formed, the tentacles or arms bud forth, and the young Feather-star, already stalked (*C*), appears in the likeness of a true Crinoid. Here development might be thought to have well-nigh attained its limit. So thought the discoverer of this little stalked form when it was announced that in the Cove of Cork a *rara avis* in the shape of a British Stalked Crinoid (duly named *Pentacrinus Europæus*) (Fig. 7, *b*) had been

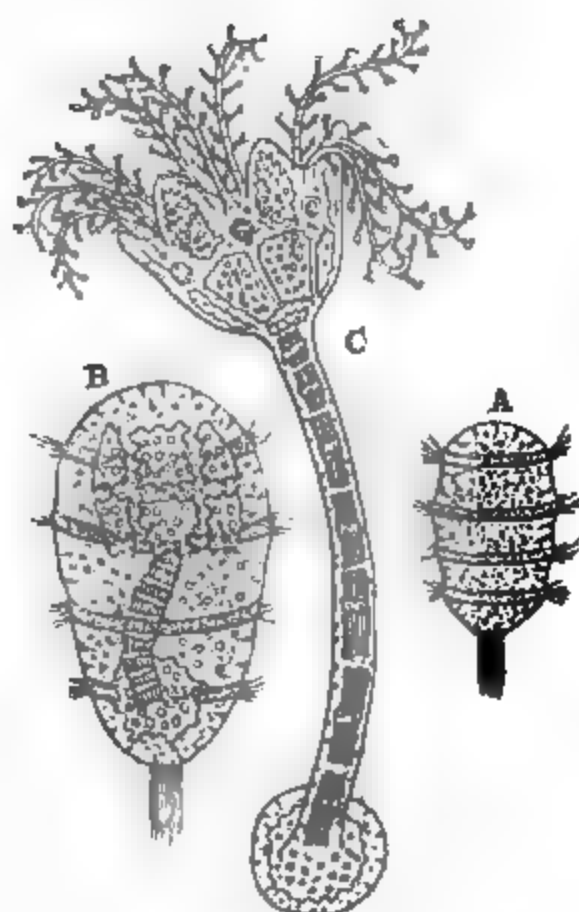


FIG. 8. DEVELOPMENT OF CRINOID.

found. But years afterwards, the little *Pentacrinus* was seen to leave its stalk, and to appear before the eyes of zoologists in the guise of an old familiar friend—the Rosy Feather-star (Fig. 7, *a*) of the coasts. Thus we discover, firstly, that Crinoids resemble their neighbours the Sea-urchins and Starfishes in the essential details of their development; and we discover, secondly, in the case of the Rosy Feather-star, a further development of the Crinoid race in that this latter organism has advanced to a free-living stage. Also noteworthy is the fact that when existing in its rooted and stalked stage, the Rosy Feather-star closely resembles the ordinary fixed Crinoids, and perhaps bears a still closer likeness to certain fossil members of the group.

The last class of Echinoderms demanding attention is that of

the Holothurians, or Sea-cucumbers (Fig. 3), found around our own coasts, but developed typically as the Trepangs and Bêches-de-Mer of tropic seas, and in marketable form as the delicacies of the Chinese. A Sea-cucumber presents us with an elongated body, bearing a tuft of feathery tentacles at the mouth-extremity, and moving by aid of tubular "feet," similar to those of the Starfishes and their neighbours. Here development resembles that of the Starfishes, and begins (Fig. 9, A B) with the production of an oval, ciliated body, which soon acquires a digestive system. The young Sea-cucumber, in the guise of what is called its "Auricularia-stage" (Fig. 9, C), presents a cylindrical figure, with four or five bands of cilia, and bearing ear-like processes—hence its name. Before this larva is fully formed, the future Sea-cucumber commences its existence as a growth existing near the larval stomach. The tentacles of

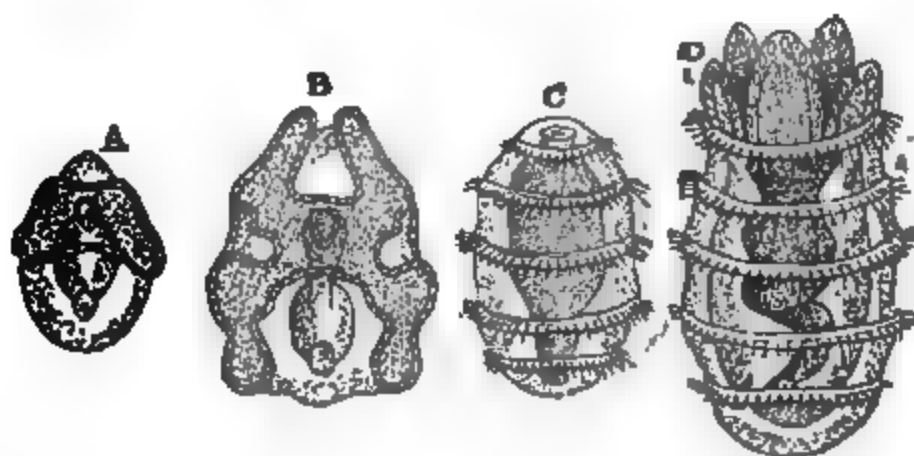


FIG. 9.

the young Holothuria soon appear (D), the ear-like projections are absorbed, the Auricularia assumes a cylindrical form, and, becoming the "pupa," bears a striking resemblance to a worm. When the process of absorption proceeds to a further stage, the Auricularia wholly disappears; and as the new body which has been developed at its expense elongates, the young Sea-cucumber form is duly evolved.

Such is the course of development in the sea-urchins and their allies. The chronicle in question is well adapted to supplement the important considerations advanced at the commencement of this paper. There is strikingly seen in the development of these animals, firstly, that broad resemblance in their earliest stages which augurs for a common derivation, and which proves, what their adult structure teaches, that these organisms are simply so many modifications of a common plan. In each and all, the first larva gives origin to a second within itself, this second growth becoming the true and adult form; so that the first larva produces the new being, as it were by deputy. And whilst] general similarity in development thus

may be taken to mean community of origin, if it has any meaning at all, there remains illustrated to us the second principle involved in the study of development at large. The differences between the early forms of these various groups are readily enough explicable on the theory that adaptation and variation (acting through undetermined laws of life, e.g. through the influence of outward conditions, or through both of these phases) have been at work, evolving, from the common larval type, the differences of form perceptible in their present-day development as well as in their adult structure. This principle of adaptation is perhaps best illustrated by those cases of "direct" development—seen in some species of Holothurians and Starfishes, &c.—in which the young appear in the parental form without undergoing a metamorphosis or series of changes. In such a case, the obliteration of these changes has probably depended upon causes which at present we are unable to trace; possibly the directly developed forms represent the later products of evolution. But it is needless to remark that, on the clear evidence afforded by the typical development of these animals generally, the theory of their common origin is in nowise affected by the elimination, here and there, of the ancestral features of the race. Perhaps the sea-cucumbers, starfishes, and sea-urchins represent the most typical and least altered cycles of development, whilst the sea-lilies and sea-cucumbers present us with the results of a more modified series of changes. But, theoretically, there is little difficulty in assuming that, could we look backwards in time with definite glance, we should expect to see the origin of our sea-stars and their allies in a stock which, if anything, approaches most nearly to the form of some primitive worm than to that of any other animal form. Such a primitive form is, perhaps, best outlined in the larva of the Sea-cucumber itself (Fig. 9, B C). Indeed, the evolution of the Echinoderms from some such worm-stock is one of the well-founded generalisations of modern zoology. There exist, it may be added, in the developmental history of the worms themselves, certain features which go far to support the idea of a far-back relationship with the sea-urchins and their neighbours—these latter forms being apparently removed very far from the worm-stock as they present themselves to our view in the forms of adult and perfect existence.

Ranking above the sea-stars, in respect of generally higher organisation, we find a very numerous and varied assortment of animals known as the *Crustacea*. The etymology of this latter term might suffice to convey information respecting the typical representatives of the group, inasmuch as the presence of a hard crust or "shell" characterises the higher forms, as well as many lower members of this class. Such

higher forms are the crabs (Fig. 10), lobsters, shrimps, prawns (Fig. 27), water-fleas (Fig. 11), and their neighbours, which possess a "shell"—although, as even a tyro in zoology knows, the "shell" of the crab is a widely different structure, in nature as it is in appearance, from the



FIG. 10. CRAB.

"shell" of the oyster or whelk. The crab's shell is periodically slipped off its body to admit of the animal's increase in size; whilst that of the mollusc—oyster, mussel, whelk, &c.—is a permanent structure, attached by muscles and other organic means to the animal's body, growing steadily as bones grow in ourselves, and form-

ing, therefore, a much more important item of bodily belongings than does the Crustacean's covering. But apart from the nature of the "shell," the *Crustaceans*, as one may see in the jointed tail of the lobster or shrimp, are very differently planned, so to speak, from the Molluscs. They are "articulate" or "jointed" animals, and naturally claim insects, centipedes, scorpions, spiders,

et hoc genus omne, as their relatives and friends. Now, this great Crustacean class includes a very motley and varied series of beings. At its head, as we have seen, are the lobsters, crabs, shrimps, and prawns; its middle-classes are represented by the

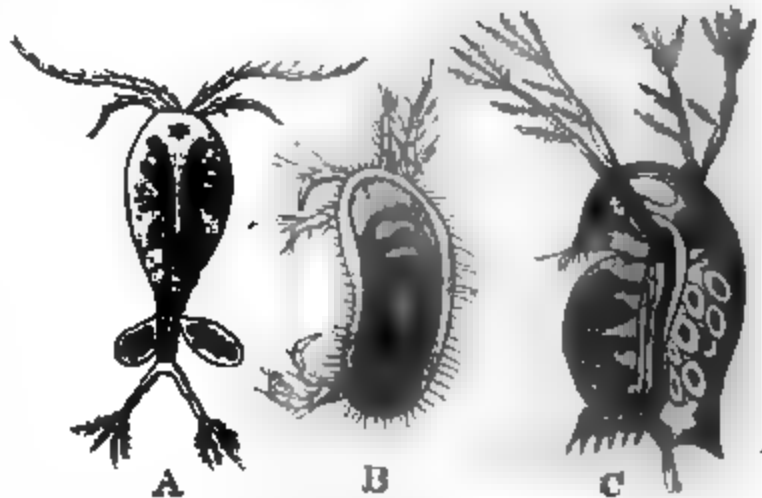


FIG. 11. WATER-FLEAS.

"water-fleas" (Fig. 11), whose name is legion; and its lower orders are the barnacles, the sea-acorns (Fig. 12), the Sacculinas (Fig. 13), and a host of other creatures which certainly present us with the best examples of degradation in the animal kingdom, in that they exist for the most part as footless, often as mouthless, and frequently as shapeless organisms, attaching themselves to fishes and to other Crustaceans, and living the low existence pertaining to the parasite whether of higher or lower grade. There seems no wider dissimilarity, for instance, between any two animals, than between the shrimp or prawn

(Fig. 27) and the bag-like *Sacculina* (Fig. 13), which attaches itself to the bodies of crabs. There is apparently a wide distinction between the structure of a crab (Fig. 10) and a water-flea (Fig. 11), still more between a barnacle (Fig. 12) and a prawn (Fig. 27). Yet in the classification of zoology these diverse beings are ranked as members of the same class, and development, as the great criterion of classifications, sanctions the arrangement. Let us endeavour to discover the grounds which warrant the assertion of such near relationship.

No fitter starting-point can be found than the development of the Barnacle (Fig. 12), which, attached to floating wood by its fleshy peduncle or stalk, inclosed within its shelly habitation, and sweeping the waters with its set of feathery plumes or "cirri," lives a life bordering nearly on the state of parasitism itself. From the egg of the barnacle—and after the preliminary stages of development which are common in greater or less degree to the personal

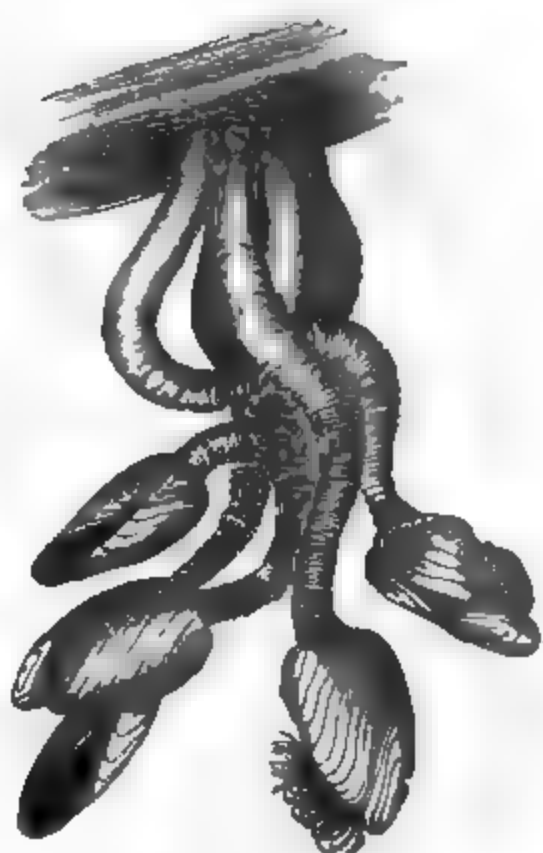


FIG. 12. BARNACLES.

evolution of all animals—comes forth a little creature (Fig. 14), so utterly unlike its parent that one might well feel disposed to reject the claims of the aphorism "like begets like," so universally expressive of the relation betwixt parent and progeny. The body of the young

barnacle is triangular in shape; its anterior angles are protruded into horn-like processes; and it possesses a mouth and digestive system, a single median eye-spot, a forked tail, and three pairs of feet or limbs. In this stage it is known as a *Nauplius*; and it may be well to keep the cha-



FIG. 13. SACCULINA.

acters of this little organism in mind, since we shall find them to reappear in the progeny of animals of diverse nature from our Barnacle. The course of *Nauplius*-life lies in the direction of frequent moults, and by-and-by it assumes, after a special change

of skin, the form of the "pupa"-barnacle (Fig. 15, B). It passes, in other words, from the days of its infancy to the days of its youth. As the "Pupa" its body is inclosed in a bivalve shell or "carapace"; two compound eyes replace the single organ of vision of the Nauplius-stage; the first pair of legs (Fig. 15, B *a*) have become enlarged

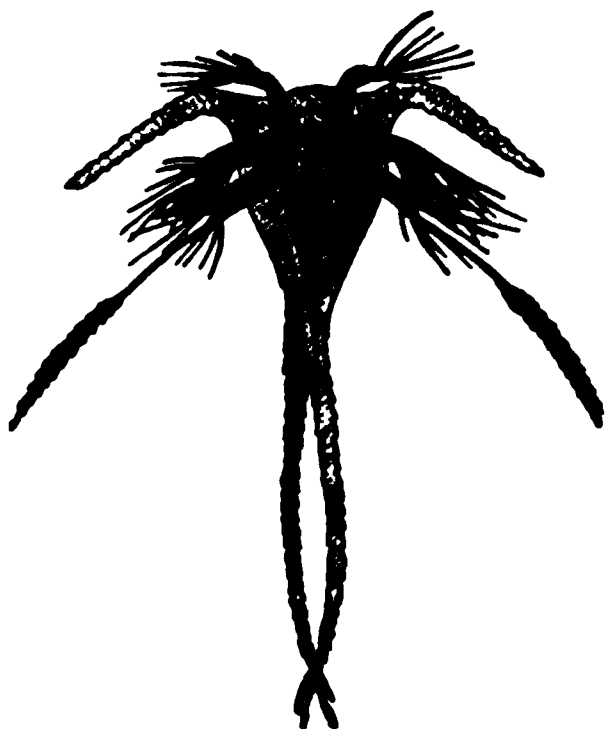


FIG. 14. YOUNG OF BARNACLE.

and appear as antennæ or feelers provided each with a sucker, whilst behind the mouth six pairs of "cirri," or small hair-like limbs (*f*), are developed. The mouth appears to become abortive in this stage, in which the resemblance of the young Barnacle to a Water-flea such as *Daphnia* (Fig. 11, c) or *Cypris* (B) is sufficiently striking. Darwin remarks, that in the Nauplius-stage the young barnacles feed actively and increase in size; whilst in the second stage, their function is "to

search out by their well-developed organs of sense, and to reach by their active powers of swimming, a proper place on which to become attached and to undergo their final metamorphosis." The concluding phases in barnacle-history are not difficult to trace. The body of the young barnacle becomes somewhat flattened and compressed, and, as Darwin remarks, resembles in its shape a mussel-shell or the water-flea known as *Cypris* (Fig. 11, B). The carapace or shell appears paramount in the final stages of development, the limbs and body being hidden and inclosed by the shell; and although jaws exist, these organs are covered by integument, and the organism is thus deprived of the power of nourishing itself. Certain remarkable glands now begin to be developed in the pupa-barnacle; these organs opening by the so-called "cement-ducts," in the suckers of the well-developed first pair of appendages—the great feelers or antennæ already mentioned. The pupa in due time seeks a location and resting-place, and adheres (Fig. 15, A) to its floating log, or to the side of the ship, by means of its feelers. Thereupon the cement glands pour out their secretion, which acts as a veritable "marine glue," defying the solvent action of the water, and fastening the barnacle head downwards to the place of attachment. Then the compound eyes disappear, leaving the future existence of the barnacle sightless; the characteristic limy formations or plates seen in the "shell" of the adult barnacle (Fig. 12) are developed; the six pairs of swimming feet become the plumes, "cirri," or "glass hand" of the barnacle,

and by their incessant waving draw food particles into the mouth ; and with the production of the characteristic fleshy stalk or "peduncle" of the full-grown form—which grows from the front part of the body—this curious history comes to an end. Barnacle-growth therefore exhibits as its stages, firstly, a free-swimming larva or "Nauplius," with its three pairs of legs or appendages ; then a pupa

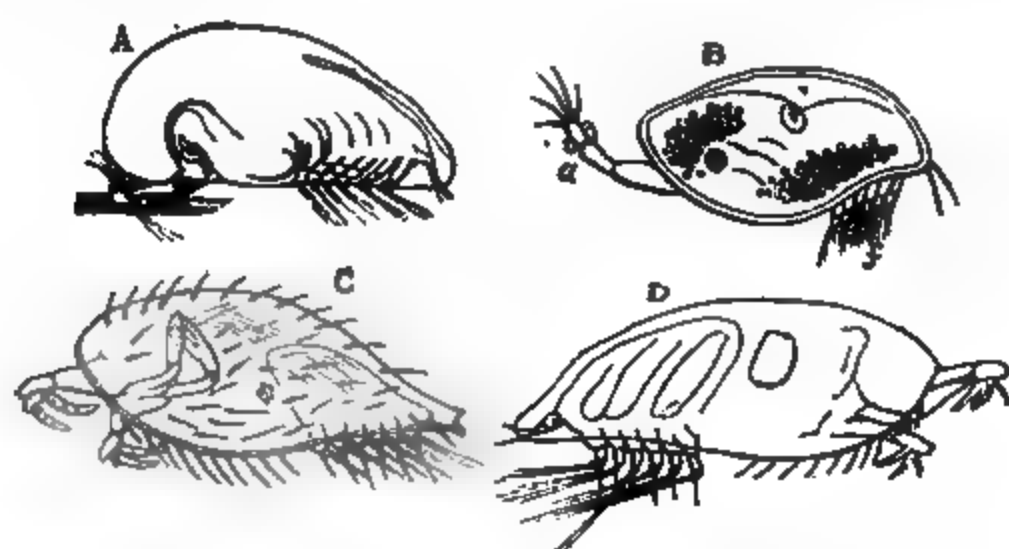


FIG. 15. DEVELOPMENT OF BARNACLES AND WATER-FLIES.

with its bivalve shell, its large feelers, its two eyes, and its six pairs of swimming feet ; and finally the eyeless, stalked, degraded adult stage, in which, to quote the words of authority, a barnacle appears as a crustacean, "fixed by its head, and kicking the food into its mouth with its legs."

ANDREW WILSON.

(To be concluded.)

*SIR THOMAS DOCWRA.**“ My Lord of St. John's.”*

AN adequate idea of the power of the Order of St. John of Jerusalem in England, at a time when it was indeed an *imperium in imperio*, can be obtained by a glance at the history of its greatest grand prior, Sir Thomas Docwra. Whether in his capacity as courtier, diplomatist, knight, or “premier baron of England,” he occupied a prominent position in virtue of his connection with the Hospitaller Order, unknown in any other subject. During the reign of Henry VIII., Wolsey and Docwra were, indeed, almost rivals in power and prominence.

The Grand Prior of St. John's, whose residence in Clerkenwell was referred to in a former paper,¹ was always an important citizen, in virtue of the wealth of the English branch of the Order; but the office acquired special lustre from the talents of the occupant now under consideration, Sir Thomas Docwra, who held it from 1501 to 1527. He was the second son of Richard Docwra, a Yorkshireman, of a birth entitling his son to become a knight of justice in the Order of St. John. His ability is testified to by the fact that he was almost chosen grand master of the Order, when the illustrious L'Isle Adam succeeded—through the numerical superiority of the French knights—in obtaining, by three votes only, the much coveted honour. With reference to this election, Aubert de Vertot, a Frenchman himself, was obliged to say: “The Englishman was distinguished by sublimity of genius and by great skill in treating with princes, at whose courts he had been employed on important occasions.”

His abilities were also borne witness to by his sovereign, with whom he was a favourite ambassador, and by his brethren of other *langues*. It was during his office that the final struggles between the Order and the growing power of the Turks were witnessed at Rhodes. There is much that is plaintive in the appeals which at that time of their agony came to England from the beleaguered knights. On October 1, 1509, the Grand Master himself, writing from Rhodes, begs Henry VIII. to send Docwra to them. Again,

¹ See *Gentleman's Magazine* for October 1880.

on November 15, 1513, came an urgent request that "Docwra may be sent as soon as the king can spare him"; and on November 12, 1515, Fabricus de Careto wrote to the king, begging that, "considering the urgency of the conflict between them and the Turk, Thomas Docwra be sent to them." That he was not expected to come empty-handed would appear from a still later appeal made from Rhodes by L'Isle Adam, who, writing, as he said, "with the Turkish fleet in sight," begged the king to "let Docwra and Newport come to their assistance, and *export the coin they had collected.*"

By this time the king's impecuniosity was such that he would have spared Docwra more readily than the coin; and, as it would not appear that Docwra was ever allowed to go, it is probable that former appeals had all implied pecuniary as well as personal assistance. The clutches of the king and of Wolsey were by this time on the vast property of the Order of St. John, not so much in the form of actual confiscation, as of polite but determined requisition. The confiscation was to come.

The admiration of the king for "my Lord of St. John's," before his mind was clouded by avarice, is apparent from the various important missions for which he selected him. Docwra was sent with the Dean of Windsor to France to administer to Louis XII. the oath for the observance of the treaty of March 23, 1509. Again, in company with the Bishops of Worcester and Rochester and the Abbot of Wynchecombe, he was sent in February 1512 on an embassy to Pope Julius II., and was present at the council held at the Lateran on Monday, April 19, 1512. Later on, in September 1514, we find him again selected as a sort of "swearing officer," and sent on an embassy to France with the Dean of Windsor and the Earl of Worcester "to take the oath of Louis, King of France, for observing the treaty of peace concluded between England and France on August 7 last, in which treaty the King of France agrees to marry the Princess Mary, sister of the King of England."

Again, four years later, Sir Thomas Docwra took part in one of the most magnificent embassies ever sent from England to France, his colleagues being the Bishop of Ely and the Earl of Worcester. By their commission, they were empowered to "treat for an interview between the King and the King of France, and for the comprehension of the King and kingdom of Scotland"; also to deliver, on receipt of 50,000 francs in crowns of gold, the city of Tournay and others to Francis or his deputies. The embassy was on such a scale as to require twenty-six vessels to convey it to Calais; and a gleam of the ludicrous shines out of the faded pages, as we read in a pitiful letter to Wolsey, from the Bishop of Ely, that

it was "the sickest passage that ever I had." The result of the mission was satisfactory: the French king took his oath to the treaty of October 2, in great state, on December 14, 1518, in presence of the English ambassadors; and we learn that on this occasion "my Lord of St. John's was dressed in black satin." On this occasion the celebrated meeting of the Field of the Cloth of Gold was arranged, and Sir Thomas Docwra appeared there on Wolsey's staff. After Wolsey and his immediate retinue came, we are told, "five or six bishops, with the Grand Prior of Jerusalem, and several prothonotaries, in crimson and black velvet, and wearing great gold chains. Then came 100 archers of the king's guards, well mounted, with their bows bent, and their quivers at their sides." At the tournament which followed, Docwra acted as one of the judges.

At the meeting between Henry and Charles V. at Gravelines in July, 1520, Docwra accompanied the English king; and in the following year, when Wolsey presided over a conference of ambassadors at Calais, he was accompanied by the Prior of St. John's, who, with Sir Thomas Boleyn, was sent on a special mission immediately afterwards to the Emperor Charles.

These facts show the importance attached by Henry VIII. to Sir Thomas Docwra's services as a diplomatist *abroad*. The position which we find him occupying at home was no less honourable. It was twofold. He had his own kingdom in Clerkenwell, and did much to adorn and complete the old priory. He even acted as a viceroy there, for we find many orders issued that "Islington, Holloway, St. John Street, Cowcross, Charter-house Lane, &c. were to be searched for suspected persons by my Lord of St. John's, or such as he shall think meet for it."

He also had solemn functions of state to perform. We find him, for example, in his place in Parliament as the premier baron of the realm, in February 1515, "among the triers of a petition from Gascony"; and, on another occasion, we find him one of the eighteen peers before whom the Duke of Buckingham was tried and convicted. He seems to have been a constant guest at court on all great occasions. As an instance, the following extract from a contemporary letter may be given: "Returned in great state with big drums and trumpets to Greenwich—heard mass—then went to dinner. Had at their table an archbishop, the Duke of Norfolk, the Treasurer, the Admiral, the Viceroy of Ireland, and the Prior of St. John's. After dinner, the king armed himself *cap-à-pie*, and ran thirty courses, capsizing his opponents, horse and all."

Until Wolsey's position with the king made the Grand Prior a dangerous rival, the two lived on the most friendly terms. In

November 1515, on the occasion of the great ceremony when Wolsey received the cardinal's hat, Docwra was present ; as also in the following year when the Cardinal gave a banquet to the Scottish ambassadors. On all purely ceremonial occasions, also, the Prior of St. John's invariably accompanied the Cardinal. The latter was not at any time a loser by his friendship with the head of the wealthy Hospitallers. In the old MSS., giving an inventory of Wolsey's household goods, we find such entries as the following: "Changeable silk, green and yellow, given by my Lord of St. John's;"—"Sixteen window-carpets, received from my Lord of St. John's, 8th December, 16th Hen. VIII.";—"Twelve carpets of beyond-sea making, received from my Lord of St. John's, 18th January, 18th Henry VIII.";—and "a table carpet given to my lord by the Lord of St. John's, 20th December, 20th Henry VIII."

The life at Clerkenwell Priory—always comfortable—was luxurious when the Prior was there. Royalty itself reserved the right of a place. Nor was the king satisfied with the right of dining himself at the Grand Prior's table : he claimed also the privilege of sending such members of his household and court as he might find it inconvenient to provide for elsewhere. As has been truly said, "It was indeed a long price which the community had to pay for the presence and countenance of the monarch, and it sometimes weighed heavily on their finances." But towards the end of Docwra's life a marked change came over his relations with the king and Wolsey. He was rarely found at court ; and the extant correspondence is generally composed of demands from Wolsey for part of the property of the Order for the king's service—the style of which may be guessed from the following sentence with which one of these requisitions concludes : "I advise you to comply without excuse or delay, according to the accompanying letters from the king."

Sick at heart and ailing in body, my Lord of St. John's did not long survive his loss of favour. He died in the year 1527, and was buried "in prioratu Sancti Johannis Jerusalem," and his successor was the distinguished knight, Sir William Weston.

The new lord of St. John's received even harsher treatment than his predecessor. Stern edicts, confiscation of property, withdrawal of the charter of the Order—the restoration of which, by Queen Mary, the Prior could not foresee—all preyed on the mind of the chivalrous Hospitaller ; and on the day when the crowning injury was inflicted on the English *langue*, Sir William Weston joined the knights who had gone before. He was buried in the chancel of the old church of St. John, in Clerkenwell.

BISHOPS' TRANSCRIPTS.

THOUGH much genealogical information may be obtained from Court Rolls, Wills, and other sources, the main framework of an authentic and full pedigree must, at all events for the last three hundred years, be drawn from the registers of parishes. Court Rolls, of paramount importance in tracing the descent of property, deal chiefly with the heirs to the properties in the manor, and so practically concern only the main stem of the family, leaving its branches, the younger sons and their descendants, to be traced from other materials. Wills, again, while often throwing light upon distant ramifications, are unfortunately not composed from a genealogist's point of view, and are too often vague in detail. They do not usually mention other children or relatives than those alive at the testator's death, and of them only those to whom legacies are bequeathed ; and an additional obscurity in a large number of cases overshadows the relationships of the family by reason of the use of the term "cousin," common in old wills, to mean nephews and nieces, if not other degrees of consanguinity as well, in addition to its ordinary acceptation. There is confusion enough for the genealogist in the every-day use of the word "cousin," which may indeed denote any one of four relationships to a given person, in only one of which will the surname reveal what the relationship between the parties really is; in the other three cases the surname cannot possibly tell an inquirer if the cousin in question be the child of the father's sister, or the mother's sister or brother. When to this is added the possibility that it is not cousin at all in the modern sense that is meant, one's pathway through the mazes of the family becomes very treacherous. The terms "brother-in-law" and "sister-in-law," also frequently met with in documents of the last-mentioned class, are equally indefinite, since the persons denoted may be either the spouses of a sister or a brother, or the brothers and sisters of a spouse. Often, too, the suspicion will creep in, that the testator may have confused the relationships of "step-son" and "son-in-law."

But the entries in a parish register throw a flood of light upon difficulties of this kind. An inspection of the list of marriages will

easily lead to the identification of the brother-in-law, or afford materials for assigning the cousin to the proper place in the pedigree ; the entry of a baptism or burial will supply a date upon which very much may turn. Important, then, as other documents may be in such matters, the highest value must be assigned to parish registers ; and in view of the large number of missing and dilapidated registers, the copies of them sent in year by year by the parson and churchwardens to the Bishop at his visitation, called the Bishops' Transcripts, are worthy of the greatest care and attention. In 1830, of the eleven thousand parishes of England, 6,000 only possessed registers commencing prior to 1650 ; while in the case of 2,000 more the registers began since 1700. How many of these books have been lost, damaged, or destroyed since 1830, it is difficult to say ; and it must be remembered that the calculation above is based upon the date of the first entry only, and takes no notice of the fact that a register complete from its beginning, and legible and undefaced throughout, is a very rare thing to find.

Parochial registers were established by a mandate of Thomas Cromwell in 1538 ; but in 1597, it being found that they were not so regularly preserved and kept as they should be, it was ordained by the Archbishop and clergy of Canterbury that they should be transcribed into parchment books, and that copies of the registers should be forwarded annually within one month of Easter to the registrars of the various dioceses to be preserved in the Episcopal archives. This regulation was approved by Queen Elizabeth under the great seal of England, and confirmed by the 70th Ecclesiastical Canon of 1703.

This order of things existed until the confusions during the reign of Charles I., at which time parish registers were greatly neglected, and, as a natural consequence, the sending-in of transcripts to the bishop became extremely irregular. In every diocese there is a break in the series of transcripts from about 1640 to 1660, one or two parishes, perhaps, sending in their parchments a year or two later, but all ceasing, with the rarest exceptions, before 1650. Registering, indeed, went on in the parishes themselves. It was ordered in the House of Commons in 1664 that a register book should be kept in every parish, in which births, marriages, deaths, and burials were to be entered by the minister ; and in 1653 it was further enacted that in every parish a person should be appointed, to be called the " Parish Register," to keep the register book and make the entries in it. These orders, of course, made no provision for transcripts, except a permissive one in the case of marriages to the effect that if the certificate

of a civil marriage before a justice of the peace should "be produced to the clerk of the peace, and request made to him to make an entry thereof; then the said clerk of the peace is hereby required to enter the same in a book of parchment to be provided for that purpose and kept among the records of the said sessions." This regulation was not in force for many years; with the Restoration this irregular system of keeping registers ceased; the duty again devolved upon the parochial clergy, and the registers since 1660 have been for the most part well kept, though the transcripts in many instances have been very irregularly sent in to the bishop.

Of the importance of the transcripts of parish registers, apart from their genealogical utility, little need be said, it is so patent to everybody. Mr. J. S. Burn, in his book on Parish Registers, gives several instances of their importance. In the Chandos case a marriage was proved by the production of the transcript of the register of Owre in Kent, from the Archbishop of Canterbury's Registry; and the Committee of Privileges, not being satisfied with the condition of the register of Maidstone in 1603, required the production of the transcript for that year, which was found to correspond; but in the claim of Charlotte Gertrude McCarthy to the Stafford peerage in 1825, the transcripts being called for, a forgery in the original Register was discovered. A woman cut out two leaves from St. Bride's register for the purpose of destroying the proof of her marriage, but as, fortunately, there was a transcript in the Bishop of London's Registry, the marriage was proved. An agricultural labourer named Angell established a claim to property valued at a million of money; but on comparing the register produced at the trial with the transcript, it was discovered that in an entry of the burial of a woman the name Margaret Ange had been altered into Marriott Angell, and on this ground the Attorney-General moved for and obtained a new trial. For many years the usefulness of the Bishops' Transcripts has been fully proved; they have been repeatedly produced to afford evidence of forgeries in or to supply the deficiencies of parish registers.

Although the churchwardens of every parish were thus ordered to send in transcripts, and many faithfully performed their duties, there were very many who neglected to do so. The Canons of 1603 were never confirmed by Parliament, and though the transmission of these duplicates was again and again ordered, and again and again referred to in the charges of the bishops, there was no legal compulsion on the part of the parochial authorities to attend to their orders;

1 consequently in not one diocese of England is the set of tran-

scripts perfect. To prepare them and send them in costs money ; and though they were ordered and asked for, there was no provision made for the payment of the persons concerned ; and in the year 1800 the Registrar of the Diocese of London, in reply to the Commissioners on Public Records, said, "I hereby certify that it is not the custom within the Diocese of London for any return to be made to the Bishop's Registry of either burials or baptisms." This state of affairs at last attracted the attention of Parliament, and in 1812 an Act called "George Rose's Act" was passed for dealing with the subject of registration. This Act, amongst other details, provided for the making and transmission of transcripts to the Registrars of the Dioceses, and imposed the penalty of fourteen years' transportation for the omission to send them in in the proper manner ; but directly afterwards, with a lucidity worthy of an Act of Parliament, enacted that one half of all penalties should go to the informer, and the remainder to the poor of the parish or to charitable purposes. Such an Act is a fit subject for ridicule ; and, with the exception of the forgery clauses, it had the power of enforcing none of its enactments.

But the irregularities with which the transcripts were sent in was nothing in comparison with the ill-treatment the parchments received at the hands of the various Registrars. The same want, the want of any provision for the fees of those functionaries, led to their neglect by them ; and it was unblushingly affirmed to Sir William Betham, when he found the transcripts at York "unarranged and unconsultable," that this was so because the Act of Parliament gave no directions about fees. Transcripts directed in accordance with the Act went through the post free, but any variation from the proper mode of address made them at once chargeable, and they were refused by the Registrars and taken back to the General Post Office, where many bundles—"a large accumulation," says Burn—were eventually committed to the flames. And when they had overcome their preliminary difficulties, and were safely in the hands of the Registrars, their troubles were not over. They were usually strung together on shoelaces or string, either in bundles for each Deanery or promiscuously, the largest one being kept out to wrap the others in, and then they were tossed aside into any corner to be out of the way. No other care was taken ; damp and mildew worked their will with them unchecked ; mice burrowed into them, and then dust came down and covered all imperfections with a friendly veil. But a worse fate often awaited them. Dr. Thelwall, of Newcastle, in the *Gentleman's Magazine* for 1819, speaking about the York Registry, says : "I lately saw in the possession of a friend a great number of extracts from the register of a certain parish in the

neighbourhood, and on questioning him as to the way he became possessed of them, I was informed that they were given to him by his cheesemonger, and that copies were forwarded by the clergyman of the parish to the proper officer in a bordering diocese, and had been allowed, through the negligence of their keeper, to obtain the distinguished honour of wrapping up cheese and bacon." At Lincoln it appears that the transcripts were tied up in parcels as they were sent, bundled into boxes, and those which were written on parchment were regularly cut up for binding modern wills. Bigland, in his "Observations on Parish Registers," published in 1766, mentions that he had seen in a certain cathedral a promiscuous heap of transcripts from various parishes, crammed under a staircase in a place on the north side of the north aisle, upon the ground, without the security of a door, and exposed to destruction by damp or any other cause. Mr. Burn himself, in 1839, purchased at a bookshop the Bishop's Transcripts of fifty-eight parishes in Kent, for the year 1640; and at Lichfield Mr. Downing Bruce found the records exposed to the rain through the dilapidated state of the building in which they were kept.

The duty of safe custody, so shamefully neglected by the proper officials, was not the only one imposed upon them by the Act of 1812. A clause enacts that the Registrar shall cause the transcripts to be carefully arranged, and correct alphabetical indices to be made of all persons and places mentioned in such copies, for the use of the public. But it is needless to state that in no case has this been done. If the comparatively simple duty of preserving the transcripts from damage has been so carelessly performed, it is not to be wondered at that the more onerous one of providing indices to them should be utterly unattempted.

It is to be feared that in most of the dioceses the transcripts are still existing in a state of neglect and danger. In some, however, the case is different. At Chester the parish register returns are substantially bound in separate parishes, and kept in a large room; at York they are now better taken care of; and at Worcester private enterprise, with the consent of the Registrar, has lately dealt with

transcript up to the year 1700, sorting them into parishes, ifying as far as possible the mutilated fragments, and making a every transcript now to be found in that Registry prior to that

It is difficult, however, to do anything more than tie them up

or the respective parishes. Although they were required to what size or shape they were could be put down. Parishes,

indeed, usually kept to the same form of transcript, but their sizes differ much from year to year. Some are written lengthways, some across the parchment, and some are written on paper. One large parish would send in its transcripts in the form of a book ; another would sew long narrow strips of parchment end to end, and fill them with writing—a form which was found eminently adapted for using as strings to tie the lesser documents together with, and has suffered accordingly. Nearly universally the large parchments are used as wrappers for their more diminutive fellows ; and the consequence is that they are crumpled and torn, and the writing in many instances entirely effaced with dust and damp. Some are written with a great amount of care, and were evidently labours of love ; but in the majority of instances, to transcribe the register seems to have been an uncongenial task, and the scrawling writing and the bad spelling show that it was too often entrusted to ignorant hands.

The passing of the Registration Act of 1836, which provided a system of civil registration, has in some measure supplemented parochial registration ; but it fills a different province, and should in no way cause ministers and churchwardens to neglect their duties. Besides, it applies only to the present, and does not relieve the custodians of registers and transcripts from overhauling the documents in their charge, rescuing them from danger and neglect, and providing for their accessibility and safe custody. It is pitiable to think that the carelessness of the proper officers is allowed to expose such valuable documents to the risk of destruction, when the expenditure of a little time and trouble on the part of well-paid officials would be sufficient to bring the chaos into order. Nay, doubtless, there are hundreds of willing hands in every part of England belonging to heads endowed with every capacity requisite, who would gladly accept the task as a labour of love, were permission given. And, indeed, the work is chiefly a mechanical one ; the untying dusty bundles, separating mouldy and adhering transcripts, and sorting them out into parishes, requires little more than patience and the most ordinary knowledge of ancient handwriting. To make a list of every parchment is a light task ; to tie them up in brown paper parcels requires only care ; and the storing of them in safety afterwards is but a small thing to require of those whose neglect has made such operations necessary, and to whom these archives ought to be a pride, though too often they are a standing disgrace.

JOHN AMPHLETT.

SCIENCE NOTES.

THE EARTHQUAKE LIABILITIES OF LONDON.

THE recent Agram earthquakes and the subsequent minor tremblings of a part of Scotland naturally lead us to ask whether a period of subterranean activity is approaching, and whether we may have such visitations in England. To the inhabitants of modern London this is a very serious question. By "modern" London I mean that portion which has been built since the operation of "creating ground-rents" was invented, and has been actively carried on.

This peculiar operation, if I understand it rightly, consists in buying a bit of land near any suburban railway station, building thereon some houses of villainously dishonest construction, but of showy exterior, calling them "villa residences to be sold or let" on the usual 99 years' lease, and at a high ground-rent. This ground-rent is sold to investors at a price nearly equal to the cost of the building and land, so that the cute operator can afford to sell the lease of the house itself at a very low price. The victim who buys the lease of the "desirable villa residence" discovers at the end of about five years that the annual cost of repairs and patchwork necessary to hold the thing together is nearly equivalent to the whole nett rental obtainable after paying the ground-rent; but as he must pay the ground-rent, he holds on.

I refer to these because they render the earthquake question so very serious. Hundreds of thousands of people are now residing in such houses with upper-story walls of only one brick thickness. Upon these walls the roofs entirely depend, and the framework of these roofs is the flimsiest that can, by the exercise of the utmost structural ingenuity, be made to hold together until the purchasing victim is hooked. The principals, rafters, tie-beams, king-posts, &c., are commonly made of unseasoned wood, which ultimately shrinks, and renders the whole structure more or less shaky.

What, then, must happen if London receives even a very slight earthquake shock? Calabrian experience shows that such shocks

produce curious displacements of the stones of which buildings are constructed. The tremor causes them to slide and turn upon each other, and overlap accordingly on the wall-face. Where the building stones are broad, this may occur to a considerable extent without destruction of the building, the remaining thickness of the displaced stone leaving sufficient bearing upon that below it. But where the bearing-thickness is but $4\frac{1}{2}$ to 9 inches, a displacement of anything above $2\frac{1}{4}$ to $4\frac{1}{2}$ inches must be fatal. With the rotten mortar used by the ground-rent creators, this amount of displacement may easily occur; and when it does, the roof must fall, burying all within the house. A single shock as severe as some of those which damaged Agram would kill half a million of people in and around London.

Is there any good and sufficient geological reason why London should be less liable to earthquakes than other European cities? and why England generally should suffer less than continental Europe, or even less than Scotland?

I think there is. My reasons for this conclusion will be better understood if the reader will refer to the last paragraph of page 752 in the last number of this magazine. The uptilted strata then described, besides being very numerous one above the other and of varying structure, are broken through in a great many places by faults and by the trap dykes described on page 750.

A little reflection will show that such a structure of deeply dipping inclined stratified rocks of great variability is specially ill adapted for the communication of any vibratory shock or continuous wave. If we strike an empty tumbler it rings freely, that is, the blow produces a vibration or glass-quake that runs throughout the material or crust of the tumbler. Now put a second tumbler inside the first so as to produce a compound crust analogous to loosely superposed varying strata. The ring will be much deadened. If the tumbler be cracked to represent a geological fault, the communication of vibration is still more effectually checked. Our skulls are constructed on this principle to prevent vibratory concussion of the brain. There are two plates of bone ("*tables*," as the anatomist calls them), an inner and outer one, with spongy bone or "*diploe*" between them. These bones are elaborately cracked by *sutures* or stitched-like separations, and thus the shock resulting from an ordinary blow on the head is limited in its range of bone-quake.

So with the strata or upper crust of England. The compact rocks capable of transmitting an earthquake wave are intercalated or sandwiched with soft, crumbly, inelastic shales or friable sandstones, which act like the diploe of the skull; and besides this they

are traversed by multitudes of faults, joints, and dykes, that break their continuity as the sutures of the skull separate the parietal bones from each other, and from the frontal and occipital.

London shares this advantage with the additional protection of resting on a deep basin of alluvial deposits, thick beds of clay, sand, and gravel, the most effectual of dampers to any sharp vibration ; and these are underlied by still thicker chalk, by no means a good conductor of mechanical vibrations.

In these respects London contrasts strongly with Edinburgh ; England generally with rocky Scotland, and still more so with great Continental areas, where one continuous rock stretches over hundreds of square miles without a break, and is therefore able to transmit an earthquake shock to vast distances beyond its originating centre. Thus the great European earthquake of 1755, the tragic focus of which was Lisbon, produced greater disturbances in Scotland and Norway than at London. The water of Loch Lomond "rose against its banks, and then subsided below its usual level. The greatest perpendicular height of this swell was 2 feet 4 inches" (Lyell). No equal disturbance of the Thames or of its estuary is recorded, though it is so much nearer to the upheaving focus.

These considerations, however, only apply to the facilities of communication of earthwaves spreading from distant centres. The case would be quite different if the disturbing force were immediately below London or within one or two hundred miles on either side of it. Slight shocks of this kind have been felt in London and may be again.

Long, long ago England must have been fearfully shaken, as the abundant faults plainly show. In these "the vertical displacement is between 600 and 3,000 feet, and the horizontal extent thirty miles or more ; the width of the fissures, since filled up with rubbish, varying from ten to fifty feet" (Lyell). Such fractures as these, whether the effect of one or many shocks, indicate an immense amount of terrestrial activity and disturbance. We may indulge in the consolation that these ancient catastrophes have diminished our present liability to their recurrence; but should be deceived if we imagine that they secure complete immunity, or justify us in allowing the further perpetration of prospective homicide by the building of human habitations with slated roofs resting on thin walls made of bad bricks and worse mortar.

ELECTRIC PERFORATION OF GLASS.

IF I shared the popular belief concerning the making of fortunes by means of patents, I should rush to the Great Seal Office with a provisional specification for glass sieves and ventilating window-panes, the sieves being made of window glass pierced with thousands of small holes, through which corrosive liquids might be strained, and other sifting processes demanding extreme cleanliness be conducted.

The ventilating window-pane should be similarly perforated, so that air might stream gently through it without any blast or draft, and without the outside ugliness that limits the use of perforated zinc for ventilating purposes.

But the drilling of small holes in glass is apparently a tedious and costly process. It was so really at one time, but is not so any longer. Forty years ago, plates of glass were perforated by sparks from the Leyden jar. If the spark were passed directly upon a clean surface, the glass was liable to be shattered ; but by covering it with oil, the perforation was clear and without star.

In those days it was necessary to do much laborious turning of the electrical machine in order to charge a jar with sufficient intensity and obtain the requisite spark. Now, by means of the Rumkorff coil, we may obtain, without any such effort, volleys of sparks, following each other faster than we can count them. By simply burying one of the terminal wires in a plate of ebonite, allowing its point to project just beyond the surface, and moving this over one side of a sheet of glass of suitable thickness, smeared with olive oil, each spark may be made to punch a small hole through the glass. Very simple machinery might be devised for moving the surface of ebonite regularly over that of the glass, and thus regulating the distances and arrangement of the perforations automatically.

I have used perforated zinc very successfully for ventilation, by merely taking out a pane of glass from a skylight or upper part of a window and substituting the zinc. This, for the outlet of air. For inlet, a perforated zinc plate was substituted for one of the lower wooden panels of the door. By these means a moderate-sized room was made available for the meetings of a small class, which room was intolerable before; for when the door and windows were closed the atmosphere was suffocating, and when opened, those who sat near to the entering blast became shivering rheumatized martyrs. In like manner, a lecture theatre was ventilated by substi-

tuting a large plate of perforated zinc for the glass skylight, and making several lower openings, all of which were similarly panelled with perforated zinc plates. But these were very ugly, while the perforated glass would be unobjectionable, provided the holes can be made large enough.

THE PATHOLOGY AND PREVENTION OF SEA SICKNESS.

DR. BEARD, of New York, has published "A Practical Treatise on Sea Sickness," in which he affirms, rather positively, that it may be prevented by large doses (30 to 60, and even 90 grains) of bromide of sodium three times daily. If the sodium salt is not obtainable, bromide of potassium, ammonium, or calcium, may be substituted. It should be taken before starting—better a whole day before—and the dose continued so long as the danger continues.

He shows that sea sickness is not an ailment to be laughed at, but is one that does considerable, and sometimes permanent, mischief to the sufferer, and may even be fatal. The popular notion that it is sometimes beneficial, by "clearing the stomach," is treated by Dr. Beard as it deserves. The most rudimentary acquaintance with the physiology of digestion would teach that the stomach can require no such clearing, seeing that it empties itself immediately the digestion of each meal is completed.

Dr. Beard regards sea sickness not as a disease of the stomach or liver, but as one of the nervous system. In a review of his book in *The Journal of Science* this view is described as "a new departure."

Such, however, is not the case. In Vol. II. of *The Phrenological Journal*, published in 1825, the cerebral origin of sea sickness is suggested on page 428, and further discussed on pages 645–6, where some confirmatory experiments of a Liverpool correspondent are described as follows: "A year or two ago he sailed for some hours in a steam packet, in rather rough weather, and had recourse, in vain, to every expedient to get the better of the horrible nausea and sickness thereby produced. It occurred to him at last, after various trials, that if he could keep his eyes fixed upon any motionless object, and, at the same time, completely hide all sight of the vessel's motion, he might thereby keep his mind steady, and regain and preserve his equilibrium. With this view he placed himself with his back towards the deck, with both elbows on the gunwale, and, with the palms of his hands, guarded both eyes from all sight of the vessel, and fixed them with a steady gaze upon the point of a distant

hill, endeavouring, at the same time, to engage his mind in thought and abstract his attention from the vessel." In three minutes "he lost all sense of motion," and recovered. On four subsequent occasions he varied and repeated the same experiment, and always with success.

These experiments are worth repeating, on account of their physiological as well as their practical interest. I cannot try them myself, being proof against these miseries. If confirmed by the experience of others, an apparatus might be devised to substitute the palms, and guard the eyes, while leaving the hands at liberty. This would be preferable to large doses of bromides, which act rather seriously on the nervous system.

FIREPLACE REFORM.

DR. SIEMENS, the inventor of the most important and successful modern improvement in furnace construction, has come to the rescue of the dirty atmosphere of London. He has shown how we may obtain a perfectly smokeless *open fire*, so open, so bright, and so "cheerful" as to satisfy all the cravings of English fire-worshippers, who must stare at the fire as well as be warmed by it.

He does this by filling the back part of the grate with coke, and throwing upon the front portion of the heap of coke a sheet of gas-flame. The combustion of the gas is complete and smokeless, so also is that of the coke. The gas is supplied by a pipe extending along the lower and front part of the grate; this pipe is perforated with holes about three-quarters of an inch apart, and through which the gas issues. The bottom of the grate is formed by a dead plate instead of bars, and the air admitted from below is deflected to the front by this plate in such wise that it shall supply the requirements of combustion to the gas. Thus the combustion takes place mainly in front, and the radiation is thereby rendered economically effective for warming the room rather than the chimney.

A common fire-grate may be easily and cheaply fitted with these simple appliances; but for the complete carrying out of Dr. Siemens's improvements, and obtaining the most effective and economical combustion, a grate should be specially constructed, like that which he has used in his office. This includes supplementary devices consisting of a plate of copper at the back of the grate, and a corrugated sheet of thin copper, or "frill," as he calls it, by the aid of which the air that passes through a channel below the dead plate bottom of the grate is heated to about the melting point of lead

before reaching the gas issue, and thus the combustion of the gas is rendered more brilliant and effective.

Dr. Siemens has carefully compared the cost of this with that of the ordinary fire-grate formerly used in the same place. The old fire-grate consumed two scuttles of coal daily, each containing 19 lbs. of coal, which, at 23s. per. ton, cost $5\frac{7}{10}d.$ for each day of nine hours. With the new arrangement the gas consumed (as measured by a special meter) amounted to sixty-two cubic feet per nine hours. The cost of this at 3s. 6d. per thousand, added to 22 lbs. of coke at 18s. per ton, amounted to a little more than $4\frac{7}{10}d.$, thus directly saving about one penny per day. The total effective saving was greater than this, as the room was warmer, no fire-wood or loss of time was required in lighting, and the fire could be turned out at any moment, or regulated according to the severity of the weather. Over and above these are the saving and comfort of avoiding the smoke and dirt of our ordinary coal-wasting devices.

Dr. Siemens generously offers this invention free from any patent claims, and without any view to money profit, stating that he "shall be happy to furnish builders and others desirous to introduce the grate here described with the necessary indications to secure success." Some enterprising manufacturers are already advertising to supply such stoves, or to adapt the principle to existing stoves.

If this invention is appreciated and turned to practical account, as it deserves to be, Dr. Siemens will be a great benefactor to the city of his adoption. What a marvellous change would come over the face of London if its smoke were effectively abolished! We go on the Continent, and come back raving about the palazzi of Venice, and Florence, and Rome, &c.; but all the palaces of Italy added together are outrivalled in number and value, as well as in architectural beauty, by the warehouses, banks, shop buildings, and other secular edifices of London, which might be appreciated as they deserve, were they but clean. A noble building begrimed with soot has no better chance of being admired than has a beautiful woman with a dirty face.

Dr. Siemens maintains that "it is almost barbarous to use raw coal for any purpose, and that the time will come when all our fuel will be separated into its two constituents before reaching our factories or our domestic hearths." I heartily agree with him in this, and will add another and very weighty reason for this conclusion—one which Dr. Siemens does not specify. It is this: when we burn raw coal, we waste a multitude of precious products that are saved by the process of distillation in the gas retorts. There is the ammoniacal liquor

that comes off at first, and which, when wedded to the waste product of soda works, gives us sal ammoniac, from which so many useful ammoniacal compounds are prepared, and which is so useful itself. Or otherwise treated, this ammoniacal liquor becomes a valuable manure.

Then we have the coal tar, and its naphtha, from which are now obtained so marvellous a variety of brilliant dyes and delicate essences, and which is still exercising the skill of the chemist in the production of ever-extending varieties of appliances to modern luxury and substantial comfort. The last residuum, after the distillation of the material for all these, supplies us with the basis of the best of foot-paths; and if Dr. Siemens's principle is fairly carried out, we shall tread under our feet the pitchy carbon that we now draw into our lungs.

In the above estimate of cost, Dr. Siemens charges the gas at 3s. 6d. per thousand feet, but this is far beyond its legitimate value. With a steady demand for coke at the price named, and a large consumption of gas going on by day as well as by night, the gas would *cost nothing at the works*, provided they were economically and judiciously managed. The bye-products would cover all the cost of distillation of the coal and purification of the gas. One shilling per 1,000 feet would repay the cost of conveying it to our houses, and leave a handsome dividend upon the capital employed. Had gas-making been a competitive enterprise we should, ere this, have had good gas at about this price. Dr. Siemens's estimate would thus be reduced to about 3d. per day for his large room.

Be it understood, however, that in thus advocating the introduction of Dr. Siemens's open grate, I only regard it as a compromise, a concessional step towards a truly rational method of obtaining a desirable domestic climate. This may be obtainable by applying the separated coke and gas to a fire-clay heat-reservoir, constructed on the same principle as those which are used in the Northern parts of continental Europe, and by the aid of which, effective and proper ventilation may be carried out, and temperature regulated at will, with the minimum consumption of fuel.

The reservoirs are heated by wood, and the only reason why they may not be fed with coal is the liability to choking up of their complex flues by the soot. With the separated coke and gas, this objection would be obviated. I do not suppose that anything I can urge in this direction will have any effect, so universal and inveterate is the adoration of that domestic fetish, "the Englishman's fireside." He will stubbornly continue to sacrifice upon that altar, the open

grate, the greatest of his physical treasures ; and therefore, an invention like this of Dr. Siemens, which materially lessens the evils of such idolatry, is a great benefaction.

ANIMAL AND VEGETABLE FOOD.

SOME experiments have recently been made in Germany by E. von Wolff and others on the feeding of pigs, whose physical relationship to ourselves is much closer than many of us are willing to admit. A certain number of these country cousins were fed on flesh-meal and starchy food, another equal number on boiled mashed potatoes mixed with split peas and a little linseed oil. The chemical constituents of the food of both lots were as nearly equalised as possible, and the results observed. The experiments were continued for 182 days.

During this period, the swine fed on flesh-meal gained on an average 496 grammes per head daily, while those fed on the peas, &c., increased but 466 grammes, or, otherwise stated, the amount of food actually required to produce 100 kilos of live weight was in the first case 319 kilos, in the second 346 kilos.

These results chiefly refer to fattening, but are interesting so far as they go. Had muscular energy been the test, it is probable that the difference would have been more in favour of the flesh-meal. The whole subject is a very interesting one, and opens a fine field of research, which should be carried much further than mere laboratory analysis of the constituents of the food, and should especially include the effect of different modes of cooking and other preparation on the practical nutritive value of given kinds of food of stated chemical composition.

One pound of lentils, or of dried peas, or of haricots, and, I might add, horsebeans, contains much more nutritive flesh-forming material than one pound of the very best rump-steak, or any other part of an ox, or any portion of a sheep ; but it does not therefore follow that everybody, or anybody, may obtain corresponding proportions of nourishment by eating the pulse.

We do not assimilate the whole of our food, and the proportions assimilated vary greatly according to the digestibility of the food in the stomach and the convertibility of the chyme thus formed into blood. The value of animal food depends less upon its chemical composition, as displayed in a statement of the results of laboratory lysis, than upon the fact that the digestive organs of the sheep or ox have already done the work of rendering it so nearly like animal

blood that its conversion into that fluid is completed with but small further effort. Those who are strong enough to digest horse-beans, and assimilate all the nutriment they contain, may feed upon them with great economy and advantage; but others, with feebler powers, get more from beef and mutton.

Our present cookery practice is very limited and primitive: it includes but little more than different methods of applying heat to different animal and vegetable substances. The modern chemist effects marvellous transformations in his laboratory, and I think the time has now arrived when he should formally invade the kitchen, and relieve us from the humiliation of depending upon the digestive organs of domestic animals for the preparation of nutritious food from its crude vegetable constituents. If he can convert cotton pocket-handkerchiefs into grape-sugar, he should be able, by the skilful application of chemical solvents and chemical machinery, to produce beef and mutton, or their equivalents, from turnips and mangold wurzels, as effectively, and at least as cheaply, as they are now obtained by the farmer who uses for this purpose the organic secretions and vital machinery of shorthorns and Southdowns.

GREEN OYSTERS.

ONCE upon a time, when English oysters were sold in the Haymarket at fourpence and sixpence per dozen, and at street stalls in the New Cut at four a penny, the opener of these cheap luxuries sometimes came upon one with a green "beard." This was thrown away as poisonous, the green colour being attributed to copper obtained from the bottom of the ships lying in Stangate Creek and other tributaries of the Thames and Medway, where the oyster-beds then flourished. As oysters have become dearer, and consequently better observed by epicures, the green variety is not only tolerated, but actually prized as superlatively delicious. They are now specially cultivated in France and sold at specially high prices.

Chemical analysis has proved that the copper theory is a delusion. What then is the cause of the green colour?

The microscope has answered this question. It is due to the presence of a minute boat-shaped creature that lives in brackish water, and which, while living, has a cobalt blue colour. It now bears the name of *Navicula ostrearia*. It is one of the *diatoms*, those microscopic paradoxes that wander about like animals, but breathe and otherwise behave as vegetables, and are so abundant that you cannot spill a half a pint of water anywhere, and leave it stagnant

for a while, but it becomes the habitation of a colony. Their species are innumerable, many belonging especially to sea water.

About twenty-five years ago I had a curious experience of the migratory power of some of the marine species. I prepared in Birmingham (which is about as far from the sea as one can possibly be in England) some artificial sea water for an aquarium, and placed it in a glass dish exposed to the sunlight. In about a fortnight the quartz pebbles at the bottom of the dish were covered with a brown film from which minute bubbles arose. I inverted a glass funnel over these, and on the tube of the funnel an inverted test tube filled with water. In a few days the bubbles which rose into the funnel and test tube accumulated sufficiently to form an inch depth of gas at the top of the tube. This I found to be oxygen of sufficient purity to cause a glowing lucifer match to burst into flame, showing that the brown film was a vegetable growth. The microscope revealed a mass of diatoms when some of the brown slimy matter was smeared on a piece of glass and examined. These marine diatoms must either have been evolved or acclimatised from fresh-water species, or their germs must have travelled from the coast. The researches of Piazzzi Smyth on atmospheric dust indicate that the latter is the most probable explanation.

But, returning to the oysters. If white oysters are placed in a plate containing nothing but sea water and some of these blue diatoms, the greening takes place in the course of a day or two. The oyster opens its shell-mouth, and that wondrous structure popularly named the "beard," but which actually performs the function of gills and food-gathering hands, commences its customary operations. The microscopic filaments or velvet-pile of lively hairs that cover the gill-plates whip the water by a series of rhythmic movements, and thereby currents are formed about the shell-mouth; these currents carry inward the diatoms, and thus supply the oyster with food that imparts its colour to the feeder, just so much modified as to produce a bright green instead of cobalt blue.

An examination of the coloured oysters shows that their stomachs and intestines contain the carapaces or shells of the diatoms, while the juices are assimilated and diffused throughout the oyster's body, accumulating especially in the most vesicular parts, *i.e.* the mantle of the diatom, being siliceous or flinty, is not digestible by

Mr. Haswell has been studying this subject, and has gone as far as to show that the diatoms are not digested; but he does not appear to have attempted to make green soup from the diatoms by the action of the oyster.

A NEW FOOD.

M. MORIDE has introduced—theoretically—a new kind of food to the French Academy. I say “theoretically,” as he only read a paper on the subject, without supplying a banquet. It is prepared by working into a pulp raw meat previously deprived of bone and tendon, and then mixing this with bread or farinaceous substances which absorb the watery constituents of the meat, and thus form a paste. This paste is dried in air or a mild stove, and then ground and sifted. The powder is grey or yellowish, according to the material and proportions, and is said to have an agreeable flavour. By mixing this with albumen, fats, or gummed water it is made into cakes or cylinders, to be afterwards used for soups, sauces, &c. It will keep for an indefinite length of time when thus prepared, provided it is not moistened.

M. Moride affirms that this is more assimilable than cooked meat ; he gives it the name of *nutricine*, and proposes, among other applications of his invention, to preserve the refuse of slaughter-houses, the flesh of horses, blood, &c., for the feeding of dogs, pigs, ducks, and fowls.

In this I think he is anticipated by the English manufacturers of the “meat biscuits” that have long been used for feeding of dogs, &c. I have used them for feeding fowls, and found on soaking them, that the redundant water became a sort of gravy or clear soup, having an odour of cheap restaurant.

If the materials could be guaranteed, this mode of combining Australian and American flour with Australian and American meat to produce a portable, unchanging nutritious food, requiring the minimum of cooking, would be of incalculable utility ; especially if the act of union of the meat with the farinaceous matter effects an incipient decomposition or loosening of the original bonds of chemical union that renders the compound more easy of digestion and assimilation than were either of the original materials. M. Moride seems to suppose that something of this kind occurs, and there are good analogies in support of such a theory.

The soldier, the sailor, or the workman away from home, or the clerk or merchant at his office, might thus carry a penny cylinder which, merely moistened with a little hot water, would include all the materials of soup, entrée, joint, vegetables, bread, and cheese.

W. MATTIEU WILLIAMS.

TABLE TALK.

NO such tribute of admiration as Mr. Swinburne affords to the greater among his predecessors or compeers in the "Divine Art of Poetry" has ever been yielded by any poet or writer of equal fame. Like a true monarch of song—if so ardent a Republican will accept the title—Mr. Swinburne distributes among his brother potentates the badges of the order he has established. I am glad to find, in his latest essay, "Short Notes on English Poets," a trumpet-tongued utterance apropos of Milton. The opinion concerning Milton written by Mr. Rossetti, whose critical comments on the poets have furnished Mr. Swinburne with texts for his sermons, is too common among those who have not studied Milton as he deserves to be studied. "Honour," says Mr. Rossetti, "is the predominant emotion naturally felt towards Milton—hardly enthusiasm, certainly not sympathy." Of this startling declaration, Mr. Swinburne observes: "In that case, I am simply unable by any stretch of conjecture to imagine what name among all names of patriots or of poets may be found worthy to enkindle this enthusiasm which the mention of Milton's has left cold. Sympathy, indeed, we may well feel that we are hardly worthy to offer; for the very word implies some assumption of moral or spiritual equality; and he must indeed be confident of having always acted up to Milton's own ideal, and ever 'made of his own life a heroic poem,' who, remembering this, could think himself worthy to feel sympathy with the action and the passion of such lives as Milton's or Mazzini's. More reasonably may we feel as it were a righteous and a reverent delight in the sense of an inferiority which does not disable or deprive us of the capacity for adoration: a rapture of lowliness which exalts humility itself into something like the gladness of pride—of pride that we can feel, and exultation that we may acknowledge how high above us are men who are yet not too high for the loyal thank-offering not only of our worship, but surely also of our love." Admirably is this said, and the criticism of Milton that follows is not less excellent. It is, however, mortifying to find men of Mr. Rossetti's stamp treating Milton as though he stood apart from the poets who are the delight

and solace of life. Neither Dante nor Shelley is the object of enthusiasm and adoration so strong as Milton obtains from that audience, "fit though few," which he claimed. Grandeur may be a chief attribute of Milton, and the solemn subject of "Paradise Lost" may warn off a certain class of readers. It must not, however, be forgotten that Milton abounds in pictures of sensuous beauty, that his range of illustration is the widest of any poet of his class, and that his music has a delicacy, a fervour, a grace, and a power, to which none but the few very greatest lyrists have attained.

I WILL add, as a rider to this note on Milton, that it is much to be regretted that Englishmen of to-day still pin their faith upon the critics of the past century, and that the measured analysis of Addison and the grudgingly accorded praise of Johnson represent the total amount of merit the average reader will accord our great poet. Against the stammering utterances of these most imperfect judges one such opinion as is uttered by Mr. Swinburne should prevail. It is worth while, however, to point out De Quincey's declaration that "Milton is not an author among authors, not a poet among poets, but a power among powers;" and to note that Landor, who applies to Milton very exacting criticism, makes Southey, in an "Imaginary Conversation," say of some of Milton's more sensuous lines, "Here, indeed, is the triumph of our language, and I should say of our poetry, if, in your preference of Shakespeare, you could endure my saying it." To this Landor himself replies: "I would rather have written these two (concluding) lines than all the poetry that has been written since Milton's time in all the regions of the earth." With this praise and that of Leigh Hunt it is whimsical to contrast such utterances as those of Johnson and Goldsmith. It is pleasant to find that some of Milton's contemporaries knew his worth; to put, against the servile spite of Waller, Dryden's confession, "This man cuts us all out;" and the rather surprised affirmation of Bishop Burnet, who, while scarcely daring to put forward his own opinion, states that "Paradise Lost" "was esteemed the beautifullest and perfectest poem that ever was writ, at least in our language."

FEW readers of "Prince Saroni's Wife," the story contributed by Mr. Julian Hawthorne to the *Belgravia Annual*, are, probably, aware that the central and most striking incident has been, in times comparatively recent, anticipated in real life. The actors, in what seemed at one time a terrible drama, are alive, and I can accordingly furnish no such particulars as may in any slightest degree tend to

their identification. For the truth of what I state I can, however, vouch, inasmuch as I was actively concerned and strongly, if indirectly, interested in a portion of the proceedings. A lady, young, fair, distinguished, and gently nurtured, disappeared from her home. Communication was, of course, opened with the police, and shortly afterwards her nearest relatives were summoned to inspect a body that had been taken from the Thames. This was identified by them as the object of their search. Soon afterwards the missing girl returned home, and explained her absence by simple and natural causes. So absolute had, however, been the identification, that the responsibility of finding a tomb for a stranger devolved upon those by whom it had been made. Of this strange, startling, and almost inconceivable incident, Mr. Hawthorne has made powerful use. What strikes me as saddest and most mysterious, in proceedings which are of course chronicled in official records, is that a young woman of gentle condition should thus perish by accident or crime, and that no slightest inquiry should follow her death. The dramas of real life put to constant shame the inventions of romance.

THE recently published volume of Songs and Poems by the late Mr. Planché forms an agreeable and an indispensable supplement to the testimonial edition of the Extravaganzas of the same author, the appearance of which I chronicled. Over more than half a century of active life, from 1819 to 1875, these compositions range. It is scarcely surprising to those who remember the green old age of this genial and graceful writer, that a steady advance is manifested almost to the close of Mr. Planché's career, and that the latest poems have a freshness and originality to which those of earlier date put in no claim. Youth is naturally imitative, and Mr. Planché's earlier and more sentimental verses show traces of his admiration for Moore. In the comic vein which he adopted later in life he is thoroughly original. No strong or impetuous current of song is that which Mr. Planché affords. A pleasant ripple of laughing music, however, is poured forth, and to such the world is seldom too busy to listen.

THE revival of Henry Carey's burlesque of "Chrononhotonthologos," written to ridicule the inflated style of the tragedies of the time immediately antecedent to its production in 1734, furnishes an opportunity for speculation as to the period at which bragging ceased to be a portion of the warrior's trade, designed, it may be supposed, like martial attire, grimaces, and shouts, to carry

terror into the mind of an enemy Speaking of his foes, the
Monarch of Queerummania says—

Peace, Coward ! Were they wedg'd like golden ingots,
Or pent so close as to admit no vacuum,
One look from Chrononhotonthologos
Should scare them into nothing.

This is scarcely an exaggeration of the style, not only of the inflated tragedians of the eighteenth century, but of some of the master spirits of the previous century. Shakespeare, in the famous words he puts in the mouth of Pistol—

Shall packhorses
And hollow pamper'd jades of Asia,
Which cannot go but thirty miles a day,
Compare with Cæsars and with Cannibals
And Trojan Greeks ?—

is, of course, bantering the rodomontade (*pace* Mr. Swinburne) of Marlowe's "Tamburlaine." The genius of Marlowe informs with poetry his most extravagant passages. Some of the heroes of Chapman are, however, scarcely less contented with themselves than Chrononhotonthologos. Bussy D'Ambois declares to Monsieur that, under given conditions—

Like death
Mounted on earthquakes, I would trot through all
Honours and horrors ; thorough foul and fair,
And from your whole strength toss you into the air.¹

It is not only in regard to their physical capacity and heroism that Chapman's soldiers are boastful. Byron, in "Byron's Tragedy," thus harps on his own eloquence—

I made reply to all that could be said
So eloquently, and with such a charm
Of grave enforcement, that methought I sat,
Like Orpheus, casting reins on savage beasts.²

It would be easy to multiply instances of this kind, not only from Chapman, but from others of our great dramatists. It seems certain that there was something in the behaviour of the noblemen and warriors of that time to which this kind of talk corresponds. In historical records, indeed, concerning John of Gaunt and other members of a turbulent nobility, expressions not altogether unlike the preceding may be encountered. The last writer I recall who has represented as bragging, a hero in whom he was not presenting him-

¹ George Chapman, *Works—Plays*, page 163. Ed. Chatto & Windus,

² *Ibid*, page 267.

self, is Scott, who makes Marmion utter a cheerful boast so soon as he has reached the safe side of the drawbridge of Earl Angus—

And if thou said'st I am not peer
To any lord in Scotland here,
Lowland or Highland, far or near,
Lord Angus, thou hast lied.

“WE have had, in England,” writes Mr. Proctor, from Sydney, N.S.W., “some amusing illustrations of the feeling which induces many indifferent public speakers to regard with distaste the abridgment of their speeches by the reporters. And in America some clever burlesques of real speeches have been written to show what nonsense might be expected if *verbatim* reports were to be published. I do not know, however, that a speech has ever been actually reproduced precisely as delivered, until now, when the reporters in the Legislative Council, moved by the attacks made upon them in a discussion on *Hansard*, thus literally and exactly reproduced the remarks of Mr. Hay, one of their chief assailants (the report may not be so utterly ludicrous as some of the American burlesques, but it has the advantage of being strictly what it purports to be, a *verbatim* report): “The reporters—ought not to—the reporters ought not to be the ones to judge of what is important—not to say what should be left out—but—the member can only judge what is important—. As I—as my speeches—as the reports—as what I say is reported sometimes, no one—nobody can tell—no one can understand from the reports—what it is—what I mean. So—it strikes me—it has struck me certain matters—things that appear of importance—what the member thinks of importance—are sometimes left out—omitted. The reporters—the papers—points are reported—I mean what the paper thinks of interest—is reported. I can't compliment the reporters.’ It can hardly be denied that by taking him—hum—at his—ha—word, they have—ha hum—given Mr. Hay—ha—a—hum—a *quid pro quo*.”

SYLVANUS URBAN.

THE GENTLEMAN'S MAGAZINE

FEBRUARY 1881.

THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER IV.

A VEILED PROPHET.

MR. MONTANA was to remain only one night in Mr. Aquitaine's house. He was to go on to London by the next morning's train. He had important work to do in London, he said, but he did not explain what it was. He only went so far as to say it was a business which now engrossed his life, and which he would submit to the world for the first time in London.

Mr. Aquitaine noticed that, as they drove from the steamer and passed through the streets of the town, Montana glanced around him inquiringly here and there, as if he were looking out for places he knew.

"You have been in this place before," Mr. Aquitaine said. "I can see that."

"How do you know?" The question was put in cold and cautious tone, and Montana drew himself back in the carriage.

"I see you are looking about inquiringly, as if you were looking out for some place you had known and couldn't find it. Nothing wonderful in that; we make changes very quickly here."

"I have come from a country where changes are quicker," Montana said. He spoke in a deep, clear voice, habitually monotonous, giving the impression of a total absence of interest in what was going on around. "Yes; I was here long ago; when I was a boy. I hardly recollect it. I am not quite certain sometimes whether I did not only dream of it."

There was not much time that day for the new-comers to see the place, or for either set of persons—those who came from across the sea, or those who welcomed them—to study each other's ways and peculiarities. It was somewhat late when they all reached Mr. Aquitaine's house, and nearly time to dress for dinner. Two or three friends only were invited to meet the new guests. Miss Rowan was seated next to a young man who, some one told her, was a barrister, and whose name was Fanshawe. He did not seem to her in the least like any species of lawyer. He looked very young, to begin with. He was a strong young fellow, slender, but like an athlete in build ; he had short curling fair hair, and an audacious yellow moustache ; bright blue eyes, a complexion fair as a girl's, and a boyish laugh that spoke a genuine sense of enjoyment. He and she soon became friendly.

"Are you really a lawyer?" she asked him without hesitation.

"A sort of lawyer ; yes ; a barrister. I believe the two branches are all in one in your country ; isn't that so?"

"My country? America is not my country."

"No? I thought it was. I thought you were an American girl. You come from America."

"So does Mrs. Trescoe. Do you call her an American girl?"

"Oh, but she has only been across for a few months or weeks or something. However, if you say you are not an American girl, Miss Rowan, I am sure I believe you. I hope you are not offended with me. I meant no harm : there are some charming American girls."

"I should be very proud of being an American girl if I were one. I don't think there is a more enviable being in the world than an American girl ; except one."

"Yes ; and who is that one?"

"An American boy, of course."

"Oh, I say !" and Fanshawe laughed.

"But I am not an American girl," Miss Rowan said. "I am Irish ; I have only been living in America."

"Do you like America?"

"I love it. So you are really a lawyer?"

"Well, I shall be really a lawyer when the law-going public find out my merits and the solicitors send me briefs—which as yet they have unaccountably omitted to do, perhaps by reason of some vile conspiracy."

"A lawyer! I should never have thought it," Geraldine said meditatively.

"Why not?"

"Well, I thought lawyers were generally old and grizzled and grim, and that they wore spectacles."

"When we are successful we come to that," Fanshawe said gravely. "That's what we look forward to."

"Success is all like that, I really believe," Geraldine said, with earnestness.

"Like what, Miss Rowan?"

"Like that. I am sure you understand. It comes too late to be enjoyed; or if it comes early it often goes too soon. It is bought too dearly. I am sometimes sorry for men because they have to try to be successful. I am glad to be a woman for that reason; we have not to try for it. There is no success for us."

"Except a brilliant match."

"Yes; that is our laurel wreath, our one hope to make life worth enduring. Happily, we are soon put out of pain. The prize does not come with grey hair and spectacles. Our struggle is short. In America we give up at five-and-twenty."

"But you are not five-and-twenty?"

"No; but why do you assume that I have given up?"

"I don't assume anything of the kind. You have only to go in and win."

"Thank you; that was kindly said, but don't try any more like it. Let us not pay compliments."

"Very well. You are going to London soon?"

"Yes; I am longing to go."

"I am so glad you are going. I live there."

"I am very glad you live there."

"Thank you—especially as you banish compliments. Yes—I come from this town; but I live in London now. My father had a place here once, but he sold it. He got not to like it. My sister died here; and he didn't like the whole place any more."

"I am not surprised," said Miss Rowan softly. "The place where one we loved has died; who could bear to see it always?"

"It was a sad story altogether," Fanshawe said. "They had quarrelled, don't you know—at least, you couldn't know, of course; but they had quarrelled—about a love-match my sister would make; and then my people would have made it up gladly, but—well, she died, and there was an end of it. Then my father couldn't stand the place any more, and so he gave it up."

"Was this long ago?" Geraldine asked, hoping that it was long

ago, so that the revival of its memory might be less of a pain to the young man.

"Yes, it was a good long time ago—fifteen or sixteen years. I was at school all the time in Germany, and didn't know very much about it until the end."

Geraldine liked the young man's fresh and genial manner. There was something about him sympathetic. His talk was refreshing. For the rest, the dinner-party wanted brightness. Mr. Montana spoke little, and was apparently content that people should look at him and ask each other why he did not speak. If he spoke little, he ate and drank less. He made it evident that he regarded the dinner as only a ceremonial for him. Mr. Aquitaine and Captain Marion talked a good deal ; but Mr. Aquitaine often went into local affairs, and Captain Marion knew nothing about even the local affairs of the localities which ought to have been of personal concern to himself. Mrs. Trescoe was not near any one she cared to talk to. Melissa remained resolutely silent : Mrs. Aquitaine hardly ever talked.

Geraldine rose early next morning. She was an early riser even for Mr. Aquitaine's habits. She had lived for some years lately in an American town or village where it was an article of faith that no one ought to be out of bed much after nine o'clock in the evening, or in bed after five in the morning. She had fallen into the ways of the country with a flexibility natural to her fresh and vigorous nature. She was a girl of a quick and lively curiosity, and when she was at any new place was unresting until she had seen and learned all that was within her reach to know about it. This first morning, therefore, of her stay at Mr. Aquitaine's she rose very early. She had heard the murmuring of water in her ears all the night through, and she was in hopes, not being quite clear as to the exact situation of her host's dwelling, that when she went to her window in the morning she might look upon the tossing sea. "Sing oh !" she kept murmuring to herself now and then at wakeful moments of the night ; "let man learn liberty from crashing wind and lashing sea !" murmuring from the verses of a poet to whom English criticism has not yet done justice, and probably never will. When she woke in the morning and ran to her window she saw not the sea, indeed, but a sight surely not less lovely—a bright broad river flowing in the faint light of a breezy spring dawn. Not even the sea itself has had the love of poets, and of all natures that like the poet's are for ever fresh and young, as the rivers have had. The mother may, as Burns sings, forget the child, and the monarch forget the

crown that has only been an hour upon his head : but who ever forgets the river of his youth ? As Geraldine looked out upon the stream below her window, the river of her youth came back upon her memory ; and with the river the thought of those who were happy with her by the ripple of its waters ; of the father who was father, and friend, and companion alike : and there were tears in her eyes.

She was soon out upon the breezy lawn. Preparations were being made for Mr. Montana's going. His train was starting at an early hour, and Mr. Aquitaine was to accompany him to the station. No other of the family or the guests was yet stirring. Geraldine saw Montana and Mr. Aquitaine on the lawn at a short distance from her. She was rather given to studying character, and of course, like most clever girls, fancied she had a distinct gift for the quick understanding of men and women. She had occupied herself a good deal in the voyage across the Atlantic in studying the characters of her companions, and she was of opinion that she had contrived to sound the depths of each nature except one. She was by no means clear about Mr. Montana. Sometimes he seemed to her merely vain and shallow ; but at other times he impressed her with a certain sense of awe or dread, as if there were some hidden strength of dangerous will about him ; and again in other moods he seemed to her only a self-deluded visionary. On the whole, she did not like him—a rare condition of feeling with her : for her first and natural impulse was to like people. Most of us are otherwise constructed by nature : our first instinctive impulse is to dislike any new-comer, even though he be only a wayfarer getting into a railway-carriage, where he has full as good a right to be as we have. If he turns out a good fellow or an agreeable person after, we may like him well enough ; but we leave the burden of self-vindication to him. It is enough for us that he is getting into the carriage where we are already seated, and although there be ample room for him and us, our impulse is to dislike him all the same. Now, Miss Rowan's first impulse would have been to like him, and think that he ought to be made welcome.

She went up to Mr. Aquitaine at once and received his wondering congratulations upon her early rising.

“ My daughter won't think of getting up these four or five hours yet. I am going to see Mr. Montana off by his train.”

“ May I go too ? ” Geraldine asked, delighted at the prospect of the drive, and the railway-station, and the sights new to her. She had no more hesitation about offering herself as Mr. Aquitaine's

companion than if she had been tendering her companionship to Mr. Aquitaine's wife.

He looked for a moment a little surprised, but Geraldine did not notice his surprise, and he answered at once that he should be delighted to take her with him, and show her some of the town as they passed along, and bring her back before most of the other people in the house had got out of bed.

Mr. Montana had remained silent all the time. He was looking on the river. He had not spoken a word to Geraldine.

"Strange," he said suddenly, turning to Mr. Aquitaine, "how certain scenes impress one with the conviction that he must have seen them before. I don't suppose I ever could have been just here before; and yet the look of the river makes me feel as if I had known the place once. I seem to have been young here."

"Oh, I felt exactly like that this morning," Geraldine said in quick sympathy with him, for once, as she thought. "When I looked out first and saw that lovely river flowing so fast, I felt as if I were living all my youth over again."

"All her youth?" Mr. Aquitaine said with a smile. "Is it then all gone?"

"It seems to me all gone," Geraldine said, "sometimes. It seemed so when I looked out this morning and saw the river."

Mr. Aquitaine turned to her with kindly sympathising eyes. He thought he could understand her feelings.

Montana had not been following all this.

"Was there not," he asked slowly of Aquitaine, "a park, a sort of public park, here once? somewhere on the river—as if it were here? I must have seen something of the kind when a child somewhere. Perhaps it was some other river like this."

"Why, to be sure we had a public park—a little park here on this very ground; but it is some years ago. Your feet are on what was its soil just now."

Montana started and looked down at the ground as if he expected to see some of the soil strangely clinging to his feet and in some mysterious way bearing testimony against him.

Mr. Aquitaine was launched into a little local history of the growth of the town, the disproportionate size of the former park and the necessity of starting a new one, the important part he had himself borne in that work of improvement, and the strong opposition which had been got up, and the misconstruction to which the efforts of himself and others had been subjected by their enemies. Even the most liberal-minded residents of the greatest provincial town can seldom bring

themselves to believe that local improvements and the local controversies that rage around the march of their progress are not of world-wide interest, or at least capable of being made so when expounded by some qualified lecturer.

Geraldine listened with such intense interest and beaming eyes that after a while Mr. Aquitaine accepted her as his audience and imparted all the knowledge to her. Mr. Montana was apparently not paying any attention. In an undefinable sort of way he always put himself, from the first, in the position of one who is not bound to engage in any question which he does not feel to be part of his own special mission. He had deeper thoughts, and must not be distracted from them; at least, must not be expected to endure the distraction long. He assumed this privilege; and, as he assumed it, the people he met gave it to him without struggle or protest.

"Time is getting on," Mr. Aquitaine suddenly said, looking at his watch; "I have to give one or two directions; I'll come to you when it is time to go."

He went towards the house and left Montana and Miss Rowan on the lawn by the river. Geraldine hardly ever knew what it was to feel shy or embarrassed in the presence of any one. She had not self-consciousness or self-conceit enough to be shy or nervous. But she did always find a certain sense of embarrassment in the company of Mr. Montana whenever they chanced to be for a moment alone. He had sought her society a good deal on the voyage. He had walked with her on deck now and then, in the "soft hours that fill the eyes and melt the heart," or while the steely light of the stars was on the pallid tips of the waves, and the ruddy orange glow from the stern windows sent that gleam over the sea which Coleridge finely compared to the light of experience illumining only that which it leaves behind. He had never attempted anything like flirtation with her; his manner was not that of a man who cared to waste his time in flirting with women; but there was a grave familiarity about him which was, she thought, addressed more distinctly to her than to others, and which displeased her. It was a manner of authority, as of one who had known her long and had a right to direct her. It was not easy to explain what there was in it which seemed to imply a sort of special companionship, a common bond, a tie like that between master and pupil, guardian and ward; but something there was in Mr. Montana's manner to her from the first which impressed her with the idea of such an assumption. There was nothing to resent; nothing that she could clearly describe even to a sister, if she had

one ; but the impression was on her, and it made her feel a little constrained in Mr. Montana's company.

It might have seemed as if he were resolved to deepen the impression now : for the moment Mr. Aquitaine had gone, he struck at once into dialogue with Geraldine, to whom he had not addressed a word before.

"Who was the young man who sat next you at dinner last night, and talked to you a great deal?"

"He is a Mr. Fanshawe," Geraldine answered. "I think I shall go in, Mr. Montana."

"Just a moment, and I will go with you. Do you know anything of Mr. Fanshawe?"

"Nothing ; I am quite a stranger here ; I never met any of the people before."

"You seemed to be interested in him?"

"Yes ; I was very much interested in him. He seemed very clever and bright, and he made himself very agreeable."

"Do you know where he comes from?"

"He told me he lives in London ; but that he belongs to this place. But, indeed, I know hardly anything about him. Mr. Aquitaine could tell you."

"Shall we go in?" he said.

Geraldine turned her back to the river, and they walked slowly towards the house. Suddenly Mr. Montana stopped and said,

"We shall meet again in London, of course ; but I want you before that to think over what I have said to you. You are bound to help us. We want you."

"Why I more than another? What can I do for you—or for anything? I have no power——"

"You have power."

"Have I? What is it?"

"You have the power of impressing men and women. If you had faith you would find it easy to fill others with the same faith. That is your calling in life. You cannot evade it. Mind, I tell you that. You will remember it afterwards. It is your calling ; you cannot evade it."

"But, Mr. Montana," Geraldine said impatiently, "do pray tell me the plain meaning of all this. Has it any meaning? I don't even know what your objects are. I don't know anything about them. Am I to have faith in projects before I even know what they are? What am I to have faith in?"

"You must have faith in me, to begin with ; I have faith in you."

Miss Rowan looked curiously at him. She was not afraid of his dark burning eyes. She looked steadily into his eyes, and she could find no meaning there ; no faith ; no purpose. They seemed shallow and cold, for all their brilliancy.

"I can't have faith in you until I know something more of you," she said, with a directness which had nothing rude in it, so frankly and simply was her answer given as a mere statement of fact. "But even if I had all the faith in the world, what would be the good of that? I don't even know what mountain you want to move."

"I have fixed on you," he said slowly, "from the first."

"From what first, Mr. Montana? We met for the first time a fortnight ago ; I hardly call it even an acquaintance."

"Do you remember 'the Ancient Mariner?' He says he knows at once the man that must hear him ; 'to him my tale I tell.' Well, I know the woman who must hear me ; to her my tale I tell."

"But, Mr. Montana, you have not told me any tale," Geraldine said, and then could have bitten her tongue for saying anything so unlucky. It seemed an invitation to him to go on and make her his confidante. Montana accepted it as such, evidently.

"You shall be told," he answered. "I don't ask you to say any more now. I shall enlist you in my cause; have no doubt of that. I want such help as yours, and I have a right to claim it."

Mr. Aquitaine appeared at the door and beckoned to them.

"I shan't go, Mr. Aquitaine," Geraldine said. "I should only delay you ; I have things to put on, and all that."

"We have time enough, as far as that goes," Mr. Aquitaine said. "Do you think I didn't make allowance for the putting-on of things? Have I not experience? Is there not Melissa? Go ; run along and put your things on ; we shall have time."

"No, thanks ; I think I have changed my mind. I should rather not go."

"Really rather not? Really and truly?"

"Really and truly."

"Well, I know ladies hate to be hurried." Mr. Aquitaine perhaps on the whole was relieved to find that they had not to wait. "Then, Mr. Montana, we'll get along. Ten minutes too early, you know, better than half-a-minute too late."

They went away. Montana shook hands with Geraldine, but did not say a word. He seemed to have made up his mind that she should be impressed with the difference of his manner to her when they were alone, and when any other was present. It did impress

her—uncomfortably. She felt like one who is being quietly, gradually entangled in some conspiracy. Montana had already got so far as to draw from her a seeming acknowledgment of her willingness to accept his confidence; and yet it would have been ridiculous, even if it were possible, for her at that moment to enter any sort of protest against such an assumption. She walked slowly to the edge of the river again, feeling strangely dissatisfied with herself. The stream lost, for the moment, all its charm.

Geraldine was not the only very early riser among the women of the house that morning. Melissa Aquitaine had passed an uneasy night, alternating between long stretches of sleeplessness, and dreams that were more unrefreshing and disquieting than even lack of sleep. She knew that Mr. Montana was leaving the house early, and she got out of bed with the dawn, and, wrapping herself in masses of covering, sat at her window. It looked upon the lawn. She had not sat there long when she saw Montana and Geraldine walking together slowly, and side by side, towards the house. They seemed deep in confidential talk. She saw them stop suddenly, as if there was some confidence they had yet to exchange before they passed indoors. Then they disappeared from her sight. She could not see from her window that her father was now on the threshold speaking with them. All she saw was that Montana and Geraldine were at that immature hour walking together side by side in seemingly confidential talk. Then, after a moment or two had passed away, she saw Geraldine come out alone, and slowly cross the lawn with the manner of one who is depressed. It would have suited well enough with the manner of a girl whose lover has just parted from her. A pang went through Melissa's heart. She hated Geraldine from that moment. She was possessed by such a vehemence of anger and bitterness of spirit that she allowed some of her wrappings to fall off her shoulders unheeded. She did not even mind the cold at such a moment; she did not care even though she was uncomfortable.

CHAPTER V.

GERALDINE.

MANY a sentimental and enamoured youth, who happened to be in converse with Miss Rowan, was struck to the heart with the deep, peculiar, dreamy gaze of her soft brown eyes. There were moments

when they looked on him, through him, into his very soul ; and yet their meaning seemed far away, rapt from earthly things. Her soul, he sometimes thought despondently, was with the stars, and not with earth and him. He could not doubt that the eyes turned kindly towards him, and rested on his eyes with unutterable softness ; and still there seemed something distant, withdrawn, suppressed, in Miss Rowan's expression. Sometimes the enamoured youth became filled with a faint hope that he was making an impression which Miss Rowan did not wish wholly to resist, and yet would not acknowledge even to herself. Even from across a table sometimes a man found those eyes resting on him quietly, softly, giving no response to his own, like the eyes of one who, waking, but hardly conscious, dreamed of him.

The explanation is simple, and not poetic. Miss Rowan was short-sighted. When she particularly wanted to see some distant object clearly, she put up her double eye-glass as unaffectedly as if she had been born and bred in Boston, Massachusetts ; but when she did not particularly want to study the object, it often happened that her eyes seemed to rest where her mind certainly was not ; and she did not know that other eyes were looking into hers. Thus it happened that some persons gave her credit for a poetic dreaminess in which she did not indulge ; and many women accused her of being a frank coquette, and making audacious work of her eyes.

The presence of Miss Geraldine Rowan always set people talking about her. She was not by any means an astonishingly beautiful young woman. But she had a very charming face, with brown hair and deep Celtic eyes. She was quick and graceful in all her movements. She had seen different kinds of life ; had had some suffering and some happiness, and had learned the art of extracting such enjoyment as might be out of any slight and chance material that was flung in her way. Her Irish birth had given her vivacity and animal spirits, along with that suffusion of the poetic which seems the inheritance of the Celtic race everywhere ; and her American life had taught her the ways of a freedom which in the old world is not the endowment of an unmarried woman. She was decidedly a clever girl ; but if she ever seemed anything of a prodigy, it could only be for the simple reason that she could do many different things well, even if she did nothing surpassingly well. She could sing ; she could play the piano and the harp—the almost forgotten harp, once the pride of every true heroine, now associated in the minds of most Londoners, at all events, with green baize and the outside of a

public-house. She could ride, drive, swim, and skate, as well as dance. She was not afraid of anything. She was fond of reading, and spoke two or three modern languages very well. Each of these accomplishments is in itself commonplace enough; even a combination of several of them would not go far towards making a feminine Crichton. But combine them all, and a few others, in the person of a graceful girl with a generous heart and a fresh, vivid nature, and it is easy to understand why young women and elderly gentlemen, as well as young men, should have agreed to exaggerate her gifts and graces into those of a paragon. Her kindly heart and sunny temper did a good deal to make people tolerant of her cleverness. She had not the least taint of the coquette in her nature. She looked straight into the eyes of every one with whom she spoke, and spoke out so frankly and directly whatever she wished to say, that it seemed hardly possible to venture on paying her any of the stereotyped compliments of society. Nature might have made her to be a special blessing to shy young men, or reserved and taciturn elders. He of either sort who most dreaded to be thrown upon the tender mercies of a girl, felt not the least embarrassment in the company of Miss Rowan. Even if he were actually left alone with her, he felt no fear about breaking down and finding that he had nothing to say. She was sure to find enough to say, and to draw him out on some subject which specially interested him. Shy Mr. Trescoe found himself, after a while, chatting freely with Geraldine Rowan. He even found himself starting a conversation with her, and asking her questions quite of his own motion. Once he was heard, in the face of a breakfast-room full of company, to invite her to take a turn with him in the garden. His wife was intensely amused, and complimented Geraldine on the success which she had accomplished in making Mr. Trescoe talk to a girl without blushing.

The company were at luncheon, and were talking of the departed guest.

"I do like him so much—so much," Mrs. Aquitaine said, in her languid way and her imperfect English. "He is so beautiful; the most beautiful man I have seen in all England. He is like a picture of the night with his great eyes."

"Splendid fellow—I know it," Captain Marion said. "I talked a great deal with him all the way across, and he let me see most of his plans. He inspires me with confidence."

"I couldn't understand his plans, all the same," Mr. Trescoe ventured to interpose.

"Dear Frank," his wife observed, "there is nothing very surpris-

ing in that. Who expected you to understand them? You don't go in much for understanding things, do you, dear?"

"Well, I don't know," Trescoe answered in perfect good-humour; "I don't set up to be very clever, Kitty, that's true enough; but I can see just as far into a millstone as my neighbour, I fancy, and I know I couldn't make out what Montana was explaining to your papa all the way over. In fact, I don't think he was explaining anything; I think he was only dodging, don't you know," he said, addressing himself to Mr. Aquitaine; "trying to seem as if he was explaining things, do you see, and not explaining them, all the same. So he struck me——"

"Struck you?" said Katherine, "struck my husband! But didn't you hit him again, Frank? I would if I were you."

Katherine's mild joke made them laugh; but it did not succeed, as she had perhaps hoped it would, in turning the conversation away from Montana.

"Nonsense—he is full of frankness," Captain Marion said. "I thought he seemed only anxious to find people with sympathy to listen to him."

"Then you understand what he is going to do in Europe?" Mr. Aquitaine asked.

"Yes, certainly; that is, I understand his general objects. I know what he would wish to do, if he could."

"Well, what does he wish to do?"

"He wants to arouse the sympathies of people here in a great scheme for the good of humanity. Of course he didn't fully go into the details of his scheme, but he will explain all that in London. He does not want it to get about before he has an opportunity of explaining it fully himself. He thinks premature and imperfect criticism would have a prejudicial effect; and of course it would. We all know that."

"Then you really don't know anything about his plans?"

"About his actual plans, no; but about his purposes I do. His purposes seem to be entirely noble."

"I think Frank wasn't so far wrong, after all," Mr. Aquitaine quietly observed.

"I am so glad to hear it," Katherine said. "Frank is so far wrong generally."

"Come now, I wasn't so far wrong once, at all events," the unruffled Frank observed.

"When was that, dear?" his wife asked with affected simplicity.

"When I asked you to marry me, Kitty."

"It was I was out of it there," said Kitty.

"But about this Montana," Aquitaine returned to the subject—"I don't like him somehow. He seems all too theatric. He is like a play-actor; he is acting always. His manner, his looks, his gestures, everything about him—acting, acting all."

"I don't think he is acting," Geraldine said emphatically, and speaking for the first time.

"Nor I," said Mr. Fanshawe.

Melissa had not opened her mouth on the subject. It was rare for that usually irrepressible little talker not to have a word to say on any question, whether she knew anything about it or not. But she had remained silent, looking up now and then from speaker to speaker, and then dropping her eyes at once. She now glanced eagerly at Miss Rowan, and her dark complexion glowed with scarcely suppressed anger, as Geraldine seemed to be coming out in defence of Mr. Montana. But her eyes flashed gratitude on Fanshawe, although he was apparently following Geraldine's lead.

"I don't believe he is acting," Miss Rowan went on. "I believe the man is self-deceived as well as deceiving. But I believe he is deceiving all the same; I think he is in love with his own ideas, or schemes, or whatever they are. I think he is in love with himself."

"If I were he, I think I should rather have been in love with Miss Rowan," Melissa said, looking saucily up with a suggestion of venom on her tremulous lips. "He might have had opportunity enough on the voyage, one would think, and since perhaps."

"Mel, my little girl, you give your tongue too much licence," her father said quietly.

"Little girls ought to be seen and not heard, I suppose," his unabashed daughter replied. "Thank you, papa; I intend to be seen as well as heard, I can assure you, and to see, too. One can see a good deal if one gets up early."

Geraldine only smiled good-humouredly.

"He had opportunity enough," she said; "but I can assure you he was not in love with me or any other girl; he was all absorbed in himself. He would hardly have been much in love with me, for I could not hide my distrust of him. I think I disliked him instinctively."

Melissa smiled scornfully. She did not believe Geraldine.

"But those instinctive dislikes," Miss Marion said—she, too, had not thus far; "are they reasonable, Miss Rowan? Are they genuine, don't you think? Are they not what men say all given to—likes or dislikes that we can't explain? I

should have thought you would not encourage such feelings. It hardly seems quite Christianlike, does it?"

"It doesn't," Geraldine admitted. "I am afraid I am a very bad Christian sometimes. I admit it is downright feminine, womanish, foolish, anything you like; but still I do feel it. And then, may there not be some warning sometimes in those undefined antipathies? We don't know quite all of nature's secrets yet, do we? But I won't try to excuse myself by inventing mysterious natural laws; I'll take all the blame of my antipathies. I can't help distrusting Mr. Montana; I don't like him."

"I don't like him," Fanshawe said earnestly. "I agree with every word Miss Rowan says."

Sydney Marion looked up sadly, but not surprised, of course; she knew how it would be. He was already becoming the bond-slave of Geraldine Rowan.

"I don't think he is acting," Fanshawe continued, volubly; "at least, I don't think he is all acting. I dare say he is half fanatic, half impostor. I dare say he believes in himself; a fellow may succeed in deceiving himself more thoroughly than he deceives any one else."

"You young men are dreadful," Katherine said. "You are all the same, just the same. It is enough to hear two or three women say that any man is handsome, and you all hate him from that moment. Talk of the jealousy of women! It's nothing to the jealousy of men—young men, I mean," she added, suddenly remembering that Captain Marion admitted all the merits of Mr. Montana.

"I don't think women are jealous of each other at all," Sydney Marion said, in a tone of gentle and almost regretful conviction.

"Not a bit," Katherine affirmed; "why should they be? As long as another woman doesn't come in one's way, I am sure we don't care how handsome she is, or how much she is admired."

"I am not jealous of handsome women," Melissa said, "but I hate them all." She delivered this gentle sentiment with her eyes fixed on Miss Rowan.

"Fie, then, my Melissa," Mrs. Aquitaine gently interposed; "I am sure you do not hate Miss Rowan."

"I didn't say I hated Miss Rowan," Melissa replied demurely.

It was not well to try to put this young lady in the right. She was like a child whom it is unwise to tempt with any questions, as something embarrassing to the general company is likely to be the result. Melissa sadly embarrassed and annoyed most of the listeners. Geraldine did not in the slightest degree mind the saucy little maiden's

attack, and only rushed to the relief of the general company, and especially of Melissa herself, fearing lest Mr. Aquitaine might feel himself called upon to administer some public and futile rebuke to his unmanageable daughter.

"Still, a man may be too handsome," she said. "Mr. Montana seems to me much too handsome. He is naturally absorbed in admiring himself and seeing what an impression he makes. I don't believe a man could be a hero who was so handsome as that. It is not the business of a man to be handsome. Perhaps it is only because of that idea that I have felt a sort of distrust of Mr. Montana; I don't know any real reason for not liking him, and Miss Marion is right. One ought not to speak as if a mere feeling of one's own were a reason. I ought not to have said anything against Mr. Montana. May I withdraw it all? Is it too late?"

"Much too late," said Fanshawe. "I stand by it all."

Mr. Montana had not been four-and-twenty hours in Mr. Aquitaine's house, and he had already succeeded in converting all the inmates of the building, permanent and temporary, into divided camps. An atmosphere of something like discomfort was making itself felt. All the women admired Montana except Geraldine alone, and Mrs. Trescoe hated her for not admiring him; while Melissa, who would have hated her if she had praised him, hated her now for pretending or daring to dispraise him. Sydney Marion was sorry for Geraldine's evident yielding to mere prejudice and feminine instincts. She too admired Montana; but her mind was distracted from entire absorption in that controversy by her sad misgivings on the subject of young Fanshawe's evident admiration for Miss Rowan. Geraldine was doubly an offender. All the men in the place admired her, and she would not admire the one man whom all the women agreed in admiring. Mr. Aquitaine was distressed by the ways of his daughter. Not merely did she persist in showing an open dislike to Miss Rowan, but she seemed unhappy on her own account as well. She crept into corners and remained silent there as long as she could, and even when drawn out of her retreats she did not enter with any spirit into conversation or amusement of any kind that was going on. Katherine was restless and fretful; now full of high spirits, and now out of humour and disposed to quarrel. Mrs. Aquitaine remained just as usual; almost absolutely without interest in anything that was going on.

Geraldine's high spirits and unfailing temper stood her now in good stead. She knew the kindly purpose of Mr. Aquitaine and his wife, and did not mind in the least Melissa's little outbursts of

anger. That is to say, she did not feel angry with the spoiled child ; but, on the contrary, she made up her mind to go roundly to work and make a friend of the girl. In any case, she considered herself as the guest of her father's dear old friend Captain Marion, and held it her first duty to take care that, so far as she was concerned, nothing should occur to make him feel uncomfortable. So she set herself to work to amuse the company as well as she might, and to charm them out of the curious English way which objects to being amused. She sang and played whenever anybody asked her ; she suggested all manner of ways of passing the time ; she talked to Mrs. Aquitaine just as long as the languid lady seemed to be amused by the talk, and stopped off at the right time. She asked a great many questions of Mr. Aquitaine, and gave full satisfaction to his desire for imparting information. He thought her not so practical a girl as Sydney Marion, but very much more interesting. He drove her out early in the morning once or twice, before most of the other guests had thought of getting up, and found he had a very delightful time of it. Geraldine had acquired all the free and fearless ways of the American girl, although she was not American either by birth or family, and she thought no more of going out in the morning with Mr. Aquitaine than she would of going out with Captain Marion, or with her own father if he were living. But it is to be feared that the other ladies did not altogether admire her behaviour in this respect. They could not say that she was bold ; even Katherine could not say so much as that. But they thought she might have remained in bed in the mornings until the other ladies found it convenient to get up.

Geraldine went her way all unconscious of the talk she was creating. As for Captain Marion, her manner to him was so affectionate that even languid Mrs. Aquitaine sometimes smiled with a half-knowing look at Sydney. Captain Marion was acknowledged by every one to be a delightful companion. He had narrowly missed being a man of talent—a certain want of force of character or of concentration had caused him to fall short of a genuine success in everything he did and everything he attempted. He had been admired in the army, but had had no chance of distinguishing himself particularly. He was a clever amateur artist ; some of his smaller water-colours had been in the Academy. He could play the violin, and was a good musician in general. He loved books and was a connoisseur in bindings. He was a student of science in an easy way, and could do a little etching. He was young in appearance and in manner ; younger still in heart. His talk was bright and even joyous, with just enough of sympathetic tenderness to give

the idea of a certain depth of character which, perhaps, when one came to explore, was not found to exist. He was still a man with whom it was at least possible to imagine a young woman falling in love—even so charming a young woman as Geraldine Rowan. “Eh, Sydney, my dear, I think you will have a young mamma-in-law—I mean a step-mamma, one of these days,” Mrs Aquitaine said to Miss Marion.

CHAPTER VI.

THE XANADU OF THE FUTURE.

THERE was a great assembly in a large London hall about a month after the landing of Captain Marion and his companions in the northern seaport. The hall was crowded; all the more so, because the manner of getting the company together had been peculiar. There was no buying of tickets, or payment of money at the doors. The company assembled by invitation. Each person had a card printed specially, and bearing his or her own name; not a name written in and filling up a space left blank for the purpose, but a separate name engraved on each card—one card specially printed for each person. Each card also contained the announcement that no other invitations whatever would be issued, nor would any notice be taken of any request, public or private, for additional admissions. The invited company included representatives of every rank, profession, and occupation. The peerage, the House of Commons, the world of fashion, the Church in all its denominations, the bench, the bar, the army, science, literature, art—all were addressed through some eminent name. The manner of distribution was perplexingly odd. Sometimes a wife was invited, and not her husband. Sometimes, out of a stately and noble household, only a girl of twenty was asked to favour the meeting with her presence; it could only be assumed that she had, at one time or another, expressed some faith or hope not common to her family, and which showed her to be in communion with the higher aspirations of humanity. Representative working men of all trades and shades of opinion found themselves bidden to this remarkable gathering; and, when they got there, were amazed to see themselves planted next to some great statesman or brilliant leader of fashion. The leaders of fashion were caught readily enough by the peculiarities of the whole affair. The London season so far had been rather dull and lustreless. No Oriental sovereign of any colour was in town just then. No sensation of any kind

had stirred the languid atmosphere until Montana made his appearance. His happy inspiration as to the form of invitation was a complete success. At first people wondered ; then laughed ; then thought they did not care to go ; then found that others were going, and that others again were dying to go and could not get invitations ; and thereupon, of course, all those who had invitations became determined to use the privilege. No cause, however great or good, could have had, to start with, anything like the impulse which was given to Montana's mission by his specially devised plan of invitation. He had managed the whole affair so cleverly ; had contrived so ingeniously to transfix with his invitations some of the leading persons in every class, profession, and movement, that not to have received one of his cards was a proof that the unfavoured creature was nobody, even in his own particular sphere. It is much to be feared that some white lies came from pretty lips concerning those invitations, and that ladies described themselves as having been invited, but resolved not to go, to whose door no messenger had brought Montana's card.

The name of Montana was not the least of the peculiarities which contributed to his sudden success. He had got at the name in a very simple way. He had made the beginning of his career in the territory of Montana, in the United States ; and, wanting a name, he had adopted for himself the name of the region in which he made a beginning. But had he had a special inspiration on the subject, he could not have done a better thing for his London success than to call himself Montana. It struck the attention at once. It did the part of a flourish of trumpets. When "Mr. Montana" was announced, the company must look up in some expectancy and curiosity. Not one in every thousand of ordinary London people knew that there was a place in the United States called Montana. Most persons, therefore, assumed that there was something Italian, or Spanish, or romantic somehow, in such a name. Even if the bearer of the name had proved to be a short, stout, and commonplace man, with reddish whiskers and redder cheeks, it would still have counted for something that he had such a remarkable name. But when the proclamation of Mr. Montana's name in a London crowd was followed by the apparition of Mr. Montana himself, the effect was something almost startling. Montana was singularly handsome. He wore no beard or moustache ; and yet—rare thing with shaven men of dark complexion—his chin and upper-lip showed none whatever of that blue-black, gunpowder-stained, tattooed appearance which suggests that the razor is always wanting. He looked over the heads of ordinary men, and of

all women. His pale, melancholy face, and his deeply brilliant eyes, seemed to look only into vacancy. He was habitually silent. He hardly ever spoke until he was spoken to ; he would stand in a crowded drawing-room or sit at a dinner-table for any length of time without uttering a word, and yet he had not in the slightest degree the manner of a shy or even a reserved man. He seemed wrapped up in the quietness of an absolute self-reliance and independence. But when spoken to, even on the most commonplace subject, he had a way of suddenly turning the light of his oppressively bright eyes on the person who addressed him in a way that seemed to ask, "Why talk commonplace to me? You and I are made for better discourse." His mere way of saying the four little words, "Do *you* think so?" made many a susceptible woman think the time had come for her to review her course of life, and test its real worth. "Do *you* think so," the words seemed to imply ; "you, who, although I never saw you before, I know to be capable of loftier thoughts, of utterances that roll from soul to soul?" An audacious stripling from the House of Commons, strong on facts and figures, once at dinner boldly encountered, or, as he put it, "tackled," Montana on some opinion the latter had been expressing with regard to the future place of the United States among the nations. The youth of promise positively affirmed afterwards, and will maintain to his dying day, that Montana knew absolutely nothing about the subject on which he was laying down the law ; that his dates, his statistics, his views as to all manner of facts only showed the most utter ignorance. He was, as he firmly believes, literally overwhelming Montana with confutation ; he hoped to expose Montana then and there ; he still insists that Montana had not one word to say in reply. Certain it is that Montana did not say one word in reply. But in the midst of the young law-maker's argument his face was lighted by a smile so sweet, so kindly, so pitying, so apparently irrepressible, that the whole company became ashamed of their friend, and felt that he must be making himself outrageously ridiculous. Montana's smile appeared to be playing on his lips in spite of himself. It said in the most expressive manner: "I will not laugh ; I will not. I must try to seem respectful. He is such an earnest little blockhead ; but, good heavens ! what a blockhead he is." The host said something meant to be soothing to his poor young friend, and broke up the conversation. They joined the ladies. Not a word more was said publicly on the subject ; but men whispered to each other that really young Symington had too much chatter, and was becoming insufferable, and they were very glad that Montana had put him down. Some of the listeners

always remained convinced that Montana had somehow or other crushed him with argument, and that Symington had shown himself shockingly ignorant. Mr. Symington fumed and chafed in vain. The pitying smile had settled him in all men's eyes.

Montana spoke to him kindly afterwards when he was leaving the drawing-room. "I will tell you all about that," he said, "some other time. It is a complicated subject, but you can be made to understand it. I like your earnestness ; it is a good sign. The man who wants to learn will learn, be the difficulties what they may."

Symington's brain seemed to reel. He positively lost his coolness and his power of speech. He was literally shut up.

Our friends, or most of them, attended the great meeting. Captain Marion had settled in London for the time, in order to show Miss Rowan everything, and to give his daughter Sydney a long-postponed holiday. Mr. Aquitaine had brought Melissa up in order that she, too, might have her share of the holiday. He did not propose to make any stay himself ; he would rush up and down after his usual fashion, leaving Melissa meanwhile in care of his friends. The whole party were in seats not far from the platform on which the orator was to take his stand. Melissa was biting her lips to keep down her impatience. She was longing for Montana to make his appearance. He had never spoken more than a few of the most formal words to her ; had probably not bestowed a single thought on her, and she could think of nothing but him. Since the first moment when she saw him he had taken a strange possession of her soul, and the poor little girl could not relieve her mind by breathing one word of confidence to any human creature. Miss Rowan's fine face, graceful figure, and animated movements attracted much attention. People set her down as foreign until she put up her double eye-glass, and then they pronounced her American. "If I had such eyes," one lady remarked, "I would rather never see anything than hide them under those horrid glasses." Captain Marion attracted some attention, partly because of his bright smile and his good figure, but partly, too, because he would persist in displaying himself in a velvet coat, which he loved to wear when lounging and working at home.

Montana came on the platform, and every one else was forgotten. The severe outlines of his evening dress made him look even taller and more slender than he really was. He hardly acknowledged the murmur of applause, but at once began to speak. He spoke in a low, sweet, measured tone. His accent was somewhat peculiar. It could not be called foreign, but it was not of London. Most people in the hall assumed that it must be American. Miss Marion whispered

as much to Miss Rowan, but Miss Rowan shook her head and said it was not American.

"Irish, perhaps," Miss Marion suggested.

Miss Rowan smiled, and said there was nothing of the Irishman about Mr. Montana, she was glad to think.

"How unjust she is!" Miss Marion sadly thought. "She hates him. Strange that so noble-minded a girl should be so prejudiced."

"Our friend is a north-country man," Mr. Aquitaine said quietly to Captain Marion; "Lancashire or Yorkshire clearly; I didn't notice it in talking with him; but it comes out now."

Montana spoke with deep feeling apparently, and with a kind of eloquence. He sometimes warmed into a glowing thought; sometimes even condescended to some quaint piece of humorous illustration. He held his audience from first to last. The whole discourse was entirely out of the common. It had nothing to do with the ordinary gabble of the platform. It had no conventional eloquence about it. There was no studied antithesis; the listener could not anticipate in the middle of a sentence the stock form of rhetoric with which it was to close. The wonderful eyes seemed to be everywhere. If by chance any of the audience became for a moment inattentive, he or she suddenly seemed to feel an uncomfortable sensation, and looking up found that Montana's eyes were fixed on the disloyal listener. A curious thing was that almost every one in the room seemed to feel the direct appeal of Montana's eyes.

The speech was an explanation of Mr. Montana's mission. Of course he had more than one mission. His life was understood to be devoted to missions of one kind or another. But the special object of his visit to Europe just now was to found a great colony in the United States, where men and women might seek and find the perfect life. The colony was to be made up of as many different nationalities as Mr. Montana could contrive to inspire with his own reforming energy and faith. From the marriages contracted within the limits of the new colony were to spring the future governing race, by whom the good life of earth's children was to be made perfect. The Englishman was to bring his solid energy and his all-conquering patience; Ireland was to give her poetic fancy and the purity of her nature; the Italian would contribute his artistic genius; the Scot his indomitable strength of will; the German his vast capacity for the acquirement of knowledge; the Frenchman his lively genius and brisk spirit of recuperation. America, of course, opening her bosom to these seekers after perfection, would contribute her ample share to the work of colonisation. The colony would be self-governing; it

would be founded on principles opposed to the base and worldly selfishness that had made property exclusive. It was to have its foundation deep down among the heroic virtues. Other communities had lived by appealing to man's least noble qualities ; now, at last, a practical appeal should be made to the better angel that dwelt within him. The war spirit could not thrive among a community which enclosed in loving bonds the representatives of so many races hitherto hostile. Temperance, self-abnegation, and the family virtues were to be the inspiration of this new enterprise. Other projects of the same kind had tried to supplant the family virtues by socialistic innovations and extravagances, and had perished of their own pride and their own sins. The New Atlantis was to be a community on which all good men and women must smile benignant approval. Around that purified and almost sacred commonwealth would grow up in time a great race of heroic, self-denying, happy men and women, governing their lives on the laws of morals, and on the laws of physical health, those embodied illustrations of the moral law. Thus, with the ages, the hopes and energies of the race would centre in the New World, which had this still newer world, an empire within an empire, enclosed within its vast domain. There would be room enough through many ages for America to take in the pilgrims and refugees of all parts of the ancient earth ; and Montana saw, with poetic or prophetic eye, a time in the dim future when Europe and Asia should be only the great holiday grounds, the vast museums and art-galleries, covered and uncovered, amid which the colonists of the new settlements might seek temporary recreation, might study the half-forgotten arts of an aged time, and coming here and there on the ruins of a prison, the wreck of a fortress, might "wonder what old world such things could see."

All that was wanted for the beginning was land, money, and colonists. Mr. Montana announced that the land could be got easily enough ; got for the asking from the generous American Government. Money was largely needed. Mr. Montana explained that this new colony was to be no ramshackle concern of log huts and shanties, and uncouth makeshift ways. The New Atlantis was to begin as it proposed to go on, in dignity and stateliness. It was an enterprise, Montana emphatically declared, of a thousand-fold more importance to the world and to history than the founding of Rome ; and it should begin in form not unworthy its glorious destiny. The city was to have gates of bronze, columns of granite, marble halls of science and art, cathedrals rivalling in majestic beauty and devotional suggestiveness the most venerable piles of the ancient world. Every architecture was to be

represented there, and who could doubt that, as time rolled on, the commonwealth would develop an architecture of its own, the compound of the world's ideas informed by the new spirit, and destined to be the last word of the architecture of the human race? The sanitary laws were to govern all the conditions of the city. The streets were to be broad indeed, but not straight and monotonous. On the contrary, the greatest diversity of size and structure was to relieve the eyes and delight the senses everywhere. Two rivers watered the base of the gentle hill on which this city of the future was to stand. The bridges over those streams alone would be like the embodied dream of a poet. To look to heaven from such a bridge and to see the stars reflected in the water below, or the sunbeams glancing on its ripples, would lift up the soul of the gazer almost as much as to bend in the cathedral and hear the organ peal forth its anthem of piety and praise. In the purified atmosphere ignoble thoughts could no more live than man's gross lungs can breathe the upper ether.

Most of the eyes that met Montana's, as he expounded his plans, were turned up with interest, admiration, and a certain amount of awe. But it must be owned that a good many pairs of sceptical or scornful eyes looked up from above moustaches and beards, and glanced through scholarly or professional spectacles. The men, on the whole, were not so much taken as the ladies. Most of the younger men admitted that he was "awfully clever," but some thought him a decided humbug; some opined that he really didn't know himself what he was talking about. Some denied that he was at all handsome or even good-looking; and by the very energy of their protests bore testimony to the effect his personal appearance must have produced. Most of the elders held the scheme to be wholly impracticable, and whispered that the moment you came to look into the thing and get the facts and figures of it, everybody would see it could not come to anything. These were the worldlings, however, the mere practical narrow-minded men of economics and statistics; and Montana had in his speech already taken order with them by expressly announcing, in tone of melancholy contempt, that wherever he went the narrow-minded and practical, the wise in their own conceit, were sure to be against him. He carried with him three classes of persons almost entirely: the earnest men and women who had views of life; the merely emotional, with whom a striking face and a strange manner are impressive; and the idle, at least among women, who were glad to be stirred by a new sensation on any terms. Many a woman's heart beat with strange pulsation as she gazed into that dark bloodless face, and fancied those eyes were turned on her.

"And now," said Montana, drawing a deep breath and flooding the audience with the light of his eyes, "we want money for this great work. I have come to Europe for help ; and I will go from one end of Europe to the other in quest of it. Let any one who hears me and wishes to give, give as may seem proportioned to his means. Let the wealthy give of their wealth, but in Heaven's name let me have the working-man's penny and the sempstress's halfpenny. One thing you are to know : I will have no unwilling gifts. Before I have done with Europe I shall be loaded with money—let no one presume to encumber me with his gift who doubts my enterprise. I will give no acknowledgment or receipt of any kind ; I will take no gift which has a name appended to it. If any lady or gentleman thinks of sending a contribution in his own name or her own name, it is useless. I will send all such offerings instantly back. There is nothing to be gained personally by contributing to my enterprise ; no, not even a line of acknowledgment in a newspaper ; not the poor credit of being anywhere mentioned or known as a donor. At each of the principal entrances of this hall there is an urn covered by a cloth. Let each who pleases raise the cloth in passing, and deposit any offering he feels called upon to make. Then let him cover the gift so that none can see it, and go his way. I entreat of him, if he does not give with his whole heart and soul, to keep his money ; not to stain our noble enterprise with the soil of his unwilling gift. Whether the money is found here or elsewhere is all the same to me and to the cause. It will come ; I only ask that it may come with a will."

The effect of this appeal was instantaneous. Almost everybody gave. Some white-haired old gentlemen took out their purses, carefully ascertained that they kept back enough to pay for a cab home, and threw the remainder of the contents into the urn. Some ladies, not a few, simply dropped their purses in, and hurried on. As Melissa Aquitaine came to one of the urns, she drew purposely behind her party. She had not a purse—hardly ever carried such an article about her. She glanced confusedly and timidly around to see if any one was looking, and then stripped off her bracelets, her rings, her brooch, her watch and chain, and dropped them in a glittering clinking heap into the urn. Her action was not unseen. A lady coming up had noticed it ; she, too, threw her bracelets, bangles, and chains into the urn. Some men stole their contribution into the place of deposit as if they were ashamed of showing any faith in the business, and yet could not help giving to it.

Miss Marion and Miss Rowan came on together. Sydney took out her little purse, and found she had only a very few shillings.

"Will you lend me some?" she said timidly to Miss Rowan, who had seen her action, and was looking at her with a sort of amused pity.

"No, indeed I won't," Miss Rowan said decidedly, "not for that thing. I'll not help you to set such folly going. But listen," she said, suddenly changing her tone, "did not Mr. Montana say that the gifts of the unbelieving would only bring discredit on the cause—a curse and not a blessing; didn't he?"

"He did, I think," Miss Marion answered faintly.

"Very well; then in that hope I make myself one of his contributors; and I give with a good will."

She tossed her purse contemptuously into the urn.

They came against Mrs. Fanshawe.

"We are going in to see him," Katherine said with sparkling eyes; "I sent Frank to tell him, and Frank says he will see us—in the reception-room, you know. He is seeing some people there; women mostly; howling swells, I suppose; duchesses and all that; but he'll see us. Isn't that sweet of him? Isn't he delightful? Doesn't he make one feel so good, and pure, and noble, and all that sort of thing? Doesn't he? The world all seems so poor and unreal. I have given something; haven't you? and I am going to send him some more. Won't you send him some more? But not in our own names; he wouldn't have that. Oh! it's all glorious, I think."

Young Mr. Fanshawe came up.

"I think it's all a confounded imposture," he said, without waiting for any one to solicit his opinion. "He's a clever fellow enough, but he's a humbug. Don't you think so, Miss Rowan?"

Already, poor Sydney Marion thought, he has learned to appeal only to her.

"I don't believe in him," Geraldine said with her accustomed energy; "I don't believe anything good will come of him or his enterprise; there is something unholy about him. I feel as if we had been assisting at a witch's sabbath."

The reception-room was crowded where Montana was receiving his friends. He spoke a hasty word or two to each person, who came up to him in turn, and quietly passed them on. There were no formal presentations. Every one whom Montana did not know, either introduced himself or was taken for granted.

"What may I do to help your cause?" an earnest lady said, with the glitter of a tear in her eyes.

"Believe," said Montana, gently pressing her hand.

She went on satisfied. There did not seem, perhaps, any very direct practical instruction in his one word of advice, but it appeared to content her craving soul.

"I want to be in the thing," said a working man. "I want to help you all I can. What have I to do?"

"Work," said Montana, looking fixedly down into his eyes. The man was of good stature, but Montana was able to look down upon him; and they shook hands, and Montana wrung his friend's rough hand with a gripe which thrilled him.

The man, too, went on his way satisfied. There was not much perhaps in being told to work. He had to work anyhow, and the one word gave him little guidance as to the best way of assisting Montana's special enterprise. But even one word, accompanied by such a look from such a face, and by the grasp of a hand which the working man found, to his surprise, considerably stronger than his own, was guidance and conviction for the time. The worker passed on, feeling a sort of vague awe, as if he had discoursed with a prophet.

An elderly, white-haired, smooth-spoken, graceful gentleman, with a double eye-glass, came softly up to Montana, announced himself as the Duke of Magdiel, and said the duchess particularly wished him to request that Mr. Montana would do her the favour of dining with them during his stay in town.

Montana drew back coldly.

"I have not the honour to know you," he said. "I have not come to London to be made a show of. I dine with my friends when I have time. You are not among the friends. I have something else to do in life besides going out to amuse strangers and to be stared at."

The abashed peer mumbled an excuse, of which Montana took little heed. The Duke of Magdiel passed along, disconcerted. Incivility puzzled him; he could not see the use of it.

A member of a small, strange, fantastic sect talked for a moment with Montana—a shabby, eager-looking man, whose wild eyes were looking through unkempt hair.

"We are a strange lot," he said to Montana. "We are not much in favour here. Every one dislikes us. They would persecute us if they could."

"I do not care about that," said Montana. "People dislike me, and would persecute me if they could. What do you want of me?"

"We'd like to have a word or two quietly with you. Some of our people would like to join with you, and go out to your new

place. We are miserably off here. We have no money, and we have no friends—only enemies. Will you let some of us come and see you?"

"Have you a place of meeting?" Montana asked.

"We have a sort of a place up some flights of back stairs, down there."

He jerked his thumb in the supposed direction, and the wild eyes turned towards the east. Somewhere in the East End, doubtless, was the temple of this odd little group of sectaries.

"I will wait on you," said Montana. "Send me a message at once. You have only to name the time that suits you, and I will go there."

This was spoken in a low tone, apparently not meant to be heard; but it so happened that it was heard by most of those in the room. Thus it became known amongst those who were interested in the night's proceedings, that Mr. Montana had repelled with cold contempt the invitation of a duchess, and had promised to go at any time out of his way down to the East End, to wait upon a miserable little group of half-crazy and poverty-stricken fanatics. The effect was happy. It added to the interest felt in Mr. Montana. Even duchesses were now more anxious than ever to have him under their roofs, and fanatics and sectaries of all kinds were disposed to put full faith in him. The night had been a complete and a splendid success.

A great crowd at the doors of the outer hall waited to catch a glimpse of the new prophet as he passed to the carriage which was known to be waiting for him. But Montana did not go out that way. He passed through a side corridor and a small door in another street, and walked home unseen and alone.

The carriage was there, however, for some time. At last the patient watchers, who still kept hoping for a sight of the prophet, saw that two or three pale and poor-looking girls, apparently of the sempstress class, were put into it by one of the liveried attendants, and heard the coachman get directions to drive them to some place in the Bethnal Green quarter. The patient watchers had something for their delay. They, too, had a story to tell of Mr. Montana. They were able to say to all they met next day, that they had seen Mr. Montana's carriage given up by him for the purpose of driving a few belated milliner girls amongst his audience to their home in Bethnal Green.

(To be continued.)

ON GARDEN SCHOOLS AND THE FRÖBEL OR KINDERGARTEN SYSTEM OF EDUCATION.¹

WE in England are as yet very little acquainted with the life and work of the educational reformer, Friedrich Fröbel. His life was one of singular labour, of thought and of action ; but the chief part of it was educational, and by that alone he lives. He was at one time a mineralogist, or at all events had a strong tendency for the study of the science, and after that, as Miss Shirreff tells us, he became a soldier. In the summer of 1812, according to her very clear narrative, he left the University of Göttingen and went to Berlin, and there found employment in a school of the same kind as the learned Institute at Frankfort which had been founded by a pupil of Pestalozzi of the name of Plamann. At this time, as he, Fröbel, was commencing his labours as a teacher, the French power wielded by Napoleon was checked by its reverses in Russia. This, says our authoress, struck the hour of deliverance for Germany, and Prussia, so heavily oppressed and so steadily pursuing the means of revenge, called on every man to take up arms against the oppressor. The King's proclamation, the personal call "To my people," was responded to with enthusiasm, and Fröbel, stirred by the call, joined with alacrity. "I had," he said, "a home, a land of my birth, but no fatherland. My own home made no call upon me. I was no Prussian, and so it happened that in my retired life the call to arms stirred me little. But something else there was which stirred me, if not with enthusiasm, yet with most steadfast determination, to take my place amongst the German soldiers, and this was the pure feeling, the consciousness of being a German, which I honoured as something noble and sacred in my own mind, and desired that it might be unfettered and able to make itself everywhere felt. Besides this feeling, I was also moved by the earnestness with which I embraced my mission as an educator."

¹ Address delivered from the chair at the annual meeting of the Fröbel Society in the large Hall of the Society of Arts, on Friday, December 10, 1880.

Fröbel entered the army, joined, with other students, the renowned corps of Lutzow's "Black Riflemen," and served with them to the end of the war.

Leaving the military life, Fröbel returned for a short season to mineralogical pursuits ; but soon the death of his brother caused him to retire from Berlin, where he was located, to the village of Kielhau, where he undertook the education of his brother's children, and of other children who joined his school. It was in this way that Fröbel commenced the great work of his life, the work that has left his name amongst the names that justly remain historical.

The educational scheme which Fröbel here developed must not be considered as unpremeditated by him. He had thought it well out before he began his practical work, and had probably all the details in his mind. Miss Shirreff takes note of two distinguishing features in Fröbel's system which, so to say, lie at the bottom of it, and which are evidently of the premeditated order. These two principles, she tells us, are the recognition of practical activity as an integral part of education, and the parallel of the mental growth of the human being with the development of all other organisms in nature. With regard to the first, Pestalozzi had attached much value to manual exercise and handicraft of various kinds, but rather as parts of physical training and technical preparation for life, especially among the lower classes. With Fröbel all outward training had an inward correlative—some mental faculty was always to be consciously brought into play, to be strengthened and directed aright, while the limbs were gaining vigour or dexterity. He did not value manual work for the sake merely of making a better workman, but for the sake of making a more complete human being. His teaching rested, says Hanschman, on the fundamental principle that the starting-point of all we know or are conscious of is action ; and therefore education, or human development, must begin in action. Through what a man works out his inward being is developed. "Life, action, and knowledge were to Fröbel the true notes of one harmonious chord. Book-study is ever in his system postponed to the strengthening and discipline of the mental and physical powers, through observation and active work. The young creature must be at home in his surroundings, learn to live, seek to understand outer and visible things, and to exercise its own creative faculty, before it is introduced to the inner world of thought, to symbols and abstractions, and made to gather up the fruit of other men's labour and experience. The second point, the unfolding of the human powers according to inner or organic laws, was at the core of the whole

theory of education laid down by Fröbel. He had watched development and gradual formation by the action of inward laws through all the realms of nature—plants, animals, and, lastly, through crystalline forms, which seized powerfully on his imagination. And that the human creature was destined by the law of its being to develop in like manner, possessed his mind as a revelation of a divine truth. I must refer you to Miss Shirreff's excellent treatise for the further elucidation of the life and thought of her hero Fröbel." What I have told thus briefly will enable those who have not before known very much of the man and of his line of observation and work to know him a little better and to wish to know of him still more.

From that which I have myself been able to gather of this man over and above what has been stated above, it seems to me that he discovered and applied three principles in education, or, more correctly speaking, in mode of education, and that the value of his system rests on these principles as a natural basis of support.

I.

THE first of these principles had relation to the early training of the child. By it the direction of education, taken so soon as there is distinct intelligence and power to reason, is turned by the most natural of all movements into learning directly from sight. The child is taught to look—and, what is more, to look correctly—at all things that are brought before it. It is made to judge of things precisely as they are. Is it colour that is before it?—it is justly taught to recognise colour, and so to ascertain without difficulty that there are several and yet a limited number of colours. Is it line and form that are brought before it?—it is persuaded to trace out the modifications of form that can be produced by straight lines, and, a little later on, by curves as well as straight lines. Is it of numbers that it has to take account?—it is gradually taught to recognise that in every thing, in every act and in every thought, there is number. Thus it is encouraged to count, to learn how to count and hold numbers in memory, to see the relationships of numbers, and how they may be added up, divided, subtracted one from another, and multiplied one by the other, before ever a systematic hard rule of arithmetic is ever heard of by the learner. In this way the child, individually, picks up his knowledge in the same way as man, generally, has through long ages picked up his knowledge. As to the formularisation of the knowledge, that is left as a thing that is as certain to come as the formularisation of rules by man when he has become sufficiently ripened in information to be able out of details to construct a science.

I stop to ask every reasonable person who will think the matter over, whether he does not feel sure that this is the only true and natural way of filling the little mind with basic knowledge? Is it not more reasonable to teach that such and such things and facts are as they are, than to prove the same by a series of arbitrary rules which are more difficult to learn than the things and facts themselves? It is all very well, when a number of facts or data have been collected, for a body of learned men to sit down and amuse themselves or belabour themselves with the task of formularising the information, and casting a set of rules and forms for deciphering the information in a particularly learned manner. It is pleasant for such learned men to dispute amongst themselves, and to get up rival schools for their respective systems. Let us not quarrel with any such mental exercise ; it produces necessity for work, and, it may be, keeps many idle hands from mischief. But, is it wise to oppress the mind of the child at the onset of its career with this learned aggregation of dusty spoil? I cannot see it, for my part ; and I think that if Frœbel had done nothing else for the little minds of his race than free them from the mental slavery involved in the ordinary hard scholastic training, he would have achieved what Miss Shirreff calls a divine work, in that work alone. Frœbel, under the head of his labour on which I am now speaking, did, however, much more, very much more. He trained the mind by the simple processes I have told, and while doing that he trained also the body. Here again he did not seek a violent and unnatural culture. By his plan the body is employed to work not for itself alone, so as to produce Hercules without wit, but for the mind also. Both have duties. The mind has a duty—to wait on and attend to the body. The body has a duty—to wait on and attend to the mind. Unequal development of either is, on his principle, bad for both. For, what is an over-cultured mind, if the body be not strong enough to support it? What is your best brain, with bad lungs or bad heart underneath it to keep it going? And what is the value of a giant's limbs if they be exercised without discretion, and if the force in them be thrown away on some fool's game or competitive imbecility? Frœbel, in short, cultivated the harmonies of life, motion, and thought, until he brought them all under one dominion, so that of those who were properly trained under his system it might be said, *Mens cujusque is est quisque*—"The mind of the man is the man himself."

The carrying out of this principle of education is naturally bounded by age. It extends in action from the age of three to that of seven years. In its progress it is all through gradational.

It sometimes happens that in the course of it the cart seems to go before the horse, because the child may actually be able to write before it is able to read ; that is to say, it has naturally learned to form mechanical signs or letters before it has become competent to read them when they are put into sentences. This, however, is no paradox. It is rather the representation of the truly natural mode of learning. It is what nearly every person left to his or her own mode of development would do. To construct a letter is an imitative proceeding of the simplest kind, caught by the eye. To read is imitative too ; but the art of it rests on form which, being recognised, is then caught by the ear.

Connected with this principle of the Froebel system there is another detail which increases, to my mind, its value in a marked degree. As in the period of age in which the system of education commences there is uniformity of learning in the midst of simplicity, so is the system made to adapt itself with the utmost readiness to both sexes alike. Girls and boys follow the process, and learn by it equally well. It is common to them both. For this reason, it is in order to bring boys and girls together in the same classes and to train them side by side. The good effect cannot well be over-estimated. The controlling influence of both sexes is felt at a time when the mind is most susceptible of impression, and the harmony of mind and body is more certainly developed. The gentleness and tenderness of the girl impress themselves on the boy ; the courage and decision of the boy influence, favourably, the girl. The boy loses the roughness that always comes from putting a number of boys together ; the girl loses the timidity and overstrained fear which almost always comes from putting numbers of girls together and allowing them to cultivate none but their own girlish fancies and exercises.

Froebel's system has been defined as one of simultaneous growth with harmonious development. The description very correctly describes the character of the system and its intentions, but it is not, to me at all events, a definition easily remembered. It does not fix itself in the mind so as to be ready at a moment's notice, and when it is recalled it is not pronounced so as to convey an immediate and explanatory notion to the listener. I had to ask for it twice before I seized upon its meaning. It would be shorter to speak of the system as one of *educational equality of mind and body* ; or, better still, as a system of *common health-education*, because under it the body and mind in common are involved in common healthiness of development and of power.

For this, after all, seems to be the essential peculiarity and advantage of the Froebel plan: that it works for health, and that when it is properly carried out it places the child of from three to seven years of age under the most favourable conditions to become a strong and healthy life. It lays the corner-stone of health. The period of life that is included in its teachings is perhaps, of all others, the most critical. At three years the child, to a considerable extent, has left the maternal lap. The nursing, brooding, warming, gentle care of the mother has passed away; the mother, perchance, has another younger care on her hands, and, if she have not, the child of three is of itself feeling its way into independence, and wants something more than to be dressed and fondled and nursed. It asks to go alone, and to be to some extent relieved from the apron-string. It wishes to mix with others of its own age and activity, and in these schools the invitation healthily to commingle with other children of its own age is most favourably backed by the discipline of active play which there awaits it. I could not urge the benefit of the system we have met to support on stronger grounds than these. The child life from three to seven is, at the best, critical. It may be that the child in the first three years of existence is more imperilled from teething and other affections of infancy than it is later on, but in the four years from three to seven its risks are very great, and the mortality is very high; while all risks are intensified by any marked errors in training the mind or the body. This is a period of intense activity of development, physical, moral, and mental. In this period impressions are absorbed from without which are never afterwards erased from the brain. The impressions so inlaid may, it is true, in the after life, during the stages of great change and diversion of intellect, be for a time forgotten. They are not lost. They are not actually dormant. Occasions arise when the man or the woman in full maturity acts unwittingly under the impulses or lessons of childhood; from the observation of which observed fact came, I suspect, the saying, that "The child is the father of the man." Then, as life advances, as the hopes and anxieties, ambitions and fears, which have crowded up the middle life pass away, as the brain is left once more in serenest mood, the impressions, the wishes, the impulses of the child-age receive, as it were, new development. The memories of the middle passage have proved fleeting and obscure; the memories of the child-life remain. The old verses, the old stories, the old events return and are remembered with pleasure or with pain, according to their nature, when all else is lost in the shadow of departed memory. See, then, how important it is to cultivate this critical period of

mental life well. It is cultivating a substratum for matured life. It is actually cultivating a final scene for aged life.

And if it be important, vital, to cultivate the faculties of the mind at the fountain-head of mind, so is it equally necessary to cultivate the physical faculties. To give, in the age of which we are thinking, full play to the limbs ; to call out all sets of muscles in their proper rank ; to make the movements of the skeleton graceful and natural ; to build up the skeleton into fine shape, so that its cavities shall be free and sufficient receptacles for the organs of life which they contain,—this is indeed work that is of first order, a foundation for the whole of life. Place before a learned and experienced physician two children of seven years of age. Let one of these children be systematically built ; let it have all the organs of its body fairly proportioned ; let its mind be clear and active ; let its mind and body tally in respect to form and mould ; let it be light of movement, blithe, and ready equally for mind-play or body-play. Let the other child be in some respects more determinately developed ; let its head or limbs be larger than those of its compeer, but out of proportion to its own general development ; let its mind be more precocious, and filled with more of so-called special knowledge and conceit ; let its muscular power be ever so much more developed for random and unsymmetrical exercises. Let these two children, I say, of the same age, but of different characters in the lines indicated, be placed before the learned physician, and let him be asked, from his carefully considered experience, which of the two is most likely to lead the most happy, the most useful, the most extended life : and some great error must underlie experience altogether if he will not tell you that the symmetrical, though, in certain details, less powerful child, has, by many odds, the best chance of being happy, useful, and long-lived.

In plainest terms, during the term of existence to which the educational system of Froebel is adapted, the best, the truest success in education must lie with that plan which shall neither exhaust the body at the expense of the mind, nor the mind at the expense of the body. So much muscular power naturally expended ; so much mental or brain power naturally expended ; so much pleasure in the expenditure of both ; so much carefully selected food to sustain both ; and so much rest for repair and nutrition ; so much of all these, duly and fairly proportioned, and so much will there be of good result in the form of common health. I sustain Froebel's discovery and the application of it on these grounds : they are sufficient, though none other were to be found.

And yet I stand appalled at the magnitude of the task which lies before us in bringing the system into general acceptance, and in removing the objections of ignorance and the obstacles of ignorance that stand in its path.

I cannot tell, lest I should be judged as giving utterance to an extremity of view that were almost revolutionary in education, the entire change that must come over the world in regard to the teaching of the young before a true and sound system of learning shall be the order of the day: a system that shall give origin to a pure and perfect intellectual manhood, and that shall allow life to progress unmolested to its extremest point.

A great and fundamental error pervades our well-meaning philosophies in respect to the period when education should begin. We hear this error described in such terms as these: that to fix truths or opinions on the mind permanently, we cannot begin too young; that progress, to be rapid and certain, must be commenced in youth; and that whoever enters a profession or calling must, of all things, never enter it late in life if he would succeed. As far as I know, there is not a grain of evidence supporting these hypothetical assertions. On the contrary, we have evidence that many of our very greatest men—our truest geniuses—have signalled themselves after commencing their careers, although the mid-day of their life had passed. Of course these examples are few, because custom has ruled that they must be few; but they are there, and, so far as they go, they demonstrate that the abstract assertion respecting necessary failure in those who do not begin young is without any solid foundation.

Froebel assumed that no child should be pressed with artificial learning until it had attained the age of seven years. I would venture to go further, and say that no artificial education should be pressed on any child until it has attained the age of fourteen years. I admit that there may be instances of rapid development in which a child can learn a great deal before that period, and perhaps without injury; but I am not dealing with such exceptions, and indeed cannot admit any exceptions into the argument, because they are too few to be weighty. I admit again that, for a time, social necessities may compel early education; but this also is apart from the true position of the question, because we ought to have no such necessities as drive us headlong against nature. When nature, with her great, strong, overwhelming voice, is calling to us day by day, nay, minute by minute, telling us that we are wrong, and chastising us right and left for our wrongness, it is no time to sit at ease

and plead for necessities which are of our own making and from our own folly. It is rather, I should think, time to begin to ask whether nature is not wiser than what we call necessity, and whether strict obedience to her is not the first and greatest of necessities.

To understand the reason why the immature child should not be pestered with artificial knowledge, it is only necessary to recall that the amount of natural knowledge which such a child is bound to acquire, whether he will or not, is sufficient, however obscure his position may be, to demand all the resources of his little intellect. We are apt to forget what this natural knowledge is ; to forget that the child comes into life with not a single impression on its brain ; that as it enters day by day into new spheres, and is brought into contact with new objects, it has everything to learn ; that it must learn names of things, properties of things, reasons for acts which it sees done, and all else that goes to make up the inventory of life. This is learning, true learning, natural learning, learning of all others not to be interfered with, yet most interfered with, nay, sometimes severely corrected. What do we too often say of a child who looks into everything ; opens bellows, perchance, to find the wind ; beats a hole through his drum to discover the cause of sound ; disembowels his trumpet to get at the music ; cuts into his ball to see what it is filled with ; or takes the back off the head of a doll to know why the eyes move ? We say the child is mischievous. Mischievous, indeed ! It is trying to know ; it is trying to discover the very things we should, and in the same way, if we were in like ignorance ; and yet we often punish a child for this, as though it were not learning by the true and natural method.

Again, we ruthlessly accuse children of being idle when they will not take to books, but will persist in preferring to "look about them" and listen to what other people are saying, and to direct our attention to what in their estimate are novelties, and in our estimate are commonplace things. But what folly is this ! for assuredly, as no two bodies can occupy the same space at one and the same time, so no one mind can take in two impressions at one and the same time ; therefore it must be that the child that was learning the natural external thing could not, at that same moment, have been learning the lesson placed before it in the book. In short, until the mind has acquired such a knowledge of surrounding objects as shall make it master of all that is connected with the circle in which it moves, everything that is artificially thrust into it or upon it must of necessity displace some knowledge that was coming to it naturally,

and which, if the knowledge be proper, useful, and good, ought not to be displaced.

But there are other lights in which this question may be viewed. It should never be forgotten that all artificial knowledge is based, even when it comes from the profoundest scholar, on natural knowledge. There is no reason to doubt, indeed, that we could go through life without artificial knowledge ; that we could be learned without books ; ay ! and very learned, too, without dogmas, rules, abstractions, theories, or philosophies. I do not say this as against the artificial, but I say it simply to indicate that the learning mind in the individual child ought to follow that same course which the universal mind has followed—that is to say, it ought to receive those artificial systems by which learning is supposed to be condensed, and at the same time amplified, after it has acquired a sound knowledge, as widely extended as possible, of the purely natural kind.

To this may be added the fact,—an all-important fact, by the way,—that if into the impressionable mind ideas be thrust, and if on it opinions and dogmas be fixed, such ideas, opinions, or dogmas, being those of mature minds, and not occurring to the young spontaneously, are apt to take root and to remain there throughout life unchanged and unchangeable. Is any picture more objectionable than that of a child with the views of a matured man ? When we meet with it in its fullest development, we treat it with contempt, astonishment, or pity, according to our appreciation of the phenomenon. We know, by experience, that the ability displayed is abortive, that it ought not to be there, and that being there it must spoil the future growth. The Japanese have a method of producing miniature oaks, pines, and other noble trees of the forest. They take a little sapling, place it in a flower-pot, cut down its rootlets, and give to it all the conditions of maturity, and it grows up a lovely little curiosity—a perfect old oak which a lady can lift in her hand and place in her boudoir. Very pretty indeed, very curious, an extremely striking illustration of the way in which little men can thwart, dwarf, and limit the great designs of the Great Schoolmaster ! But in that all is said that can be said, and it is not much to say. We ourselves imitate the same playing with the grand schemes of the universe, the same attempt to limit them, when we strive to thrust the maturity of the man on the young child. Goethe, dwelling on this same subject, has, if I recollect rightly, drawn a different analogy. He reasons on the forcing of children by comparing the act to the sowing of an acorn in a vase. The acorn, he says, grows, but the vase is destroyed. The simile is very beautiful poetically,

but not comprehensively true.; for, though the vase may sometimes be destroyed, it may also remain, letting grow from out of it an abortive oak.

The development of knowledge, that is to say, of facts and objects in the mind, requires to be constantly revised in the progress of time; and that man is the profoundest scholar who subjects his thoughts and reasonings to the publication of constant new editions. If we grow up with something always before us,—a town, a church, a castle, or aught else,—it assumes new proportions in “our estimate” every day of our lives. As the capacity of the brain enlarges, in fact, the picture painted upon it diminishes, retaining always a proportion estimated by its own permanent dimensions and our fluctuating appreciation. But if in our childhood we receive a picture of a village, a mountain, or a building, and then for many years are separated from it, bearing it only in our recollection, we are astounded, on returning to it again, to discover how small it is. Cobbett has very beautifully illustrated this in the narrative of his revisit to his native village after many years of absence; and the experience is common, I believe, to every one of us who are of mature age. Things grow relatively smaller, in fact, as the mental surface increases. The first picture taken by the mind is as a photograph, fixed long and never quite fading. We are removed from it, but it remains, and holds its place by the side of other subjects photographed later and later still, until we return to it as an original picture, and photograph it again with our larger camera and larger plate; then the new picture absorbs the older one, to our wonder and almost to our distrust.

I have applied this argument as yet to physical learning only; but the same reasoning applies to abstract learning, to knowledge founded on lesson, dogma, or inference. Between the physical and the metaphysical pictures,—between the demonstrable and the conjectural,—there is, however, a wide difference with regard to after-consequences. The man who has formed an exaggerated child’s idea of the size of his village church can correct his first impression by reference to the actual object; whereas, in regard to an opinion, he can make no such easy correction, owing to the difficulty with which the opinion is approached, and the reasoning that leads up to it. Hence, if in early life a superstition becomes firmly fixed in the brain, it usually remains there,—remains there to the exclusion of something better and wiser. It is in this way only that we can account—and in this way we can account readily—for the perversity, I had almost said, with which, in contradiction to matured experience, we so often

retain legends of the nursery. One of the ablest men I have the pleasure to know, who now receives incredulously all the mysticism of the supernatural, is still, in spite of himself, afraid of ghosts. A haunted house is to him a perpetual horror. Why? For the simple reason that in his childhood the history of a so-called haunted house, and the stories connected with it, formed one of the most prominent articles of his daily mental food. In truth, he had a haunted house, with its attendant ghost, impressed on his little brain, and there it remains, and will remain so long as he has a working brain at all.

I must be pardoned if I have dwelt rather long on the physical development of ideas, for it is impossible to deal fairly and conclusively with the subject on which I am treating in the absence of such kinds of illustration. The sole intention of the argument is to show that it is the worst of all policies to charge the mind of the child with artificial teachings and dogmas, which are themselves in a transitional state, and which time and new discovery may sweep entirely away and condemn to ignominious oblivion. I would venture, indeed, to suggest this rule for all who have the management of youth : that while the young mind should be allowed to take in at its pleasure as much of the external universe as it can have presented to it, no attempt whatever should be made to surcharge it with any opinions save those which are founded on the most comprehensive experience, and which tend to develop the scientific and moral life. Nay, in regard to all opinions, they are better taught by example than by precept ; example being the physical embodiment and presentment of principles.

On these rules, the simplest learning of the external world becomes the task, in the first place, of the brain. On that the process of reasoning—that is to say, of comparison—may safely follow ; and when the mind is fully formed by the two processes named, independent opinion may and ought to follow, but never before.

Another argument in favour of the line of instruction marked out above is, that the brain, even at its best, is only capable of taking in a certain measure of knowledge. Pressed too closely, it has a tendency to become strong on one or two points only. It has, perchance, a natural aptitude for certain developments, and these, as a result, become all-powerful, to the exclusion of other faculties which, had the cultivation been even and unforced, would have been also developed and brought out, leading to the formation of a vigorous and well-balanced intellect. I believe it will be found, without exception, that men of one idea have been overpressed children, who, finding it impossible to take in all that was tried to

be driven into them, contented themselves at last with one object, and were lost to everything else ; lost, I may say without compunction: for if there is a living bore greater than another, it is the man who knows but one thing. He is eaten up with conceit, despising those who are not up to his mark, sneering at those who are, jealous that he is not appreciated, and serenely indifferent to the best and noblest labours of humanity. The rudest observant child of nature, if he be honest and can describe her ways, is a boon companion compared with the man of one idea.

The power of the brain to receive impressions—the quality of the organ, in other words—shows itself in the capacity it exhibits for absorbing the external world. Quickness of perception indicates a brain ready and facile at absorption: dulness indicates smallness of the brain, or quality that does not receive. But under our present systems we commonly treat both conditions as one ; we spur on the precocious child because it is precocious, and we spur on the dull child because it is dull. In both cases we err. When the mind is easily influenced, the danger usually consists in pressing its powers too far, in making a show and wonder of what can be done. When the mind is dull and stupid, it is often filled to repletion before the earnest teacher is conscious of the fact: it is thus overburdened and worn by the pressure, but it is not instructed.

If any organ of the body other than the brain were concerned, the fallacy would be seen easily enough. We should never think of systematically working sound and active eyes into amaurosis, nor of subjecting weak eyes to intense sunlight; but when we have brains to deal with, we commit follies equal to both these, and think we are performing an essentially good service.

In our walks through life, how differently constituted do we find matured men ! Of one man we say he has good common sense, but no accurate knowledge ; he is trained to argument, but he lacks in comparisons, and the shallowness of his information leaves all his pretensions stranded. That man has been taught to reflect before he was told to perceive. Another man is all knowledge ; reason and comparison in his case have lost their natural and developing power ; he can remember endless things and facts, speak and read in various languages, make long calculations by strict rule, and astonish the world with his erudition. This man, educated by the extreme forced and artificial system, has laid no basis for comparison of natural things, but is proud in being “replete with thoughts of other men,” and of having so much unassorted information buried deep in his intellectual recesses.

Now and then, but only now and then, by accident as it were, we meet with the man who is learned on the natural plan, who has never been oppressed with book-hardships, but who has gradually acquired and then arranged his knowledge. Such a man, if his physical life has been equally well sustained, is a man of the day, a man who is sure to be pre-eminent, a keystone in that royal arch that is made up of knowledge and wisdom.

Inharmonious development of the body and mind of the child, during the first years of its life, leads to failure of power, physical and mental—in other words, to disease of body as well as of mind. The danger, no doubt, is most urgent when the overstrain is on the mind. The endeavour to fill the minds of children with artificial information leads to one of two results. Not unfrequently in the very young it gives rise to direct disease of the brain itself; to hydrocephalus (water on the brain), to deposit of tubercle if there be predisposition to that disease, to convulsive attacks, and even to epilepsy. In less extreme cases it causes simple weakness and exhaustion of the mental organs, with irregularity of power. The child may grow up with a memory taxed with technical details, impressed so forcibly that it is hard to make way for other knowledge. And, added to these mischiefs, there may be, and often is, the further evil, that the brain, owing to the labour put on it, becomes too fully and rapidly developed, too firm and too soon mature, so that it remains throughout life always a large child's brain, very wonderful in a child, and equally ridiculous in a man or woman. The development in an excessive degree of one particular faculty is also a common cause of feebleness. I knew an instance in which a child was "blessed," as it was said, with a marvellous gift of verbal memory. This being his "forte," his teacher, who wished every scholar to be remarkable for something beyond other scholars, played on this "forte" powerfully and with wonderful effect. By constant cultivation of the one faculty, this marvellous boy could learn off fifty lines of "Paradise Lost" or of any other book at a single reading, and could repeat his lesson on the spot without missing a word or omitting a stop. But the result was that, when the boy was sent to a university to learn a profession, he was beaten in the learning of detailed and detached facts by almost every fellow-student. Seeing slowly but surely where his weakness lay, the youth ceased to call into play his remarkable talent. It was a terrible task; but he accomplished it at last to a considerable degree, though never effectually. For a long time he made mistakes that were most annoying: he was unable, for instance, to

cast up accurately any column of figures ; he forgot dates ; he ran over or under important appointments ; he misnamed authors in speaking of works of science, art, or letters ; and, in reasoning, he would mix up two or three subjects. It took him full ten long years to unlearn his wonderful technical art.

For the reasons given, I have always persistently opposed the special-prize system in schools and colleges. As a teacher and as a student, I can recall no single instance in which noted prizemen in youth bore away more than other men the prizes—that is to say, the successes—of after-life. I have, however, many times known the successful prizeman in the class to be the least successful afterwards, and as often have known the ordinary man in class come out as the best man in life.

Overwork in the child and in the student defeats, therefore, its own object. It does not bring out the powerful brain necessary for the man : for all life is as a new and great lesson, and some young brain must be left free for the reception of lesson on lesson. Of this there need be no doubt, and there we may leave the first and leading fact. But the danger of overwork, unfortunately, is not confined to the brain ; it extends to the body as a whole. When the brain is overworked in the growing child, however well the child may be fed, there will be exhaustion of nervous force in proportion to the overwork. Thereupon will follow faulty nutrition, a stunted growth, a weak bodily framework, a badly-developed skeleton, altogether an impaired organism.

II.

I HAVE dwelt thus long on Frœbel's first principle of education, because it is without any doubt the chief part. It seems, however, to me that he made a second discovery and application, in respect to women as teachers. It is part of the Frœbel system that the woman should be the teacher of the child between its third and seventh year. If this were carried out, every woman might have the fortunate opportunity of conveying information to the young at a time when woman's intuitive care and gentleness would be most precious to the young themselves. Under such a system, every mother would become a teacher ; and, in so far as education is concerned, every woman would become a mother. Surely I need not dwell long on the advantages attendant on this reform in educational plans. What parents are there who would not prefer to commit their small and helpless children to maternal care and guidance, rather than send them out, while they are as ignorant as they are helpless, to bear the tender mercies of a school where older children, sharp, selfishly trained,

and masterful, live to worry and oppress the untrained? The thing speaks for itself. Nor do the advantages end here. There is a gain to the woman who teaches. In the act of teaching, she learns. She learns to understand human character; she learns to understand temperament; she learns to understand capacity. Thus she learns how to direct the mind, not only in its first steps, but through life; and women taught by teaching in this manner would, in a generation or two, become such guides and advisers, that a new race, I had nearly said, of healthful men and women would be introduced on the stage of the world.

III.

THERE is a third discovery and application of discovery in the Frœbel system which calls for our attention. Frœbel aimed, and as I think successfully, to make such a system of education for the young that education and happiness should flow in one continuous stream. For the future welfare of the men or women I know of nothing more telling than this. In children three temperaments or dispositions should ever be under the observation of the teacher. There are some children born of such powerfully happy disposition that nothing disturbs them. Joseph Priestley was one of these fortunates. He was born, he says, with happiness of mind as an inheritance. So, through all his varied and anxious life he maintained his equal disposition. Obstacles the most serious did not affect him. When he became a preacher, he found an impediment in his speech; he combated it without a murmur. He was poor, and wanted means for scientific research: still he was happy. He saw some of his finest and most original researches appropriated by others: he was not miserable. In Birmingham his house was burnt down by a mad mob, and all his household gods were cast to the winds: he knew no despair. He came to London a martyr of freedom, to be cut dead by his old companions of the Royal Society: he went on undismayed. At last, in his old age, he found it necessary to leave his native country, and to retire to die in the beautiful wilds of Northumberland, in America: yet he remained content, and died a death the most peaceful and blessed. It is well for us to know of such fortunate men; but they are too exceptional to affect a general system, and we must therefore provide to make all as happy. To do this, we have to study the children in respect to temperament. We find some children that are naturally happy, but easily depressed: others that are naturally melancholic, and that require at all times to be led on and encouraged. A system that is hard, over-strained, harsh, and unnatural,

fails ever to reach successfully either of these classes. It takes away the happiness from those who are born happy ; it confirms melancholy and distrust in those who are born melancholic. Froebel's system lays hold favourably of both these characters ; it sustains the merry, it cheers the sad.

And think of the boon that is thus conferred. Think how bitter is the remembrance of a miserable childhood. What tares are set to grow in the rank soil of an unhappy youthful training ! I believe, from what the many miserable have confided to me, that more than half the deepest sorrows and anxieties and irritabilities of existence are sown at the period of life which we have now under consideration.

For suggesting the cultivation of immediate and lasting happiness ; for charging the young and impressionable mind with ideas, thoughts, knowledges, and habits which will always afterwards be remembered with pleasure, we have to thank Froebel. He was the first practical scholar who showed how the thing could be done.

IV.

THE three leading features of the Froebel system thus explained, I would for a moment touch on the work of the school conducted on his system. The grand principles we have before us are to make body and mind develop in harmony together. The question stands :—How shall physical and mental growth, physical health and mental health, be made to go hand in hand ? Surely there is nothing in nature that shall part them ! Nothing. All that is wanted is for men to come to nature. But so wide is the depth between the order and the ordination of nature, and the order and ordination of man in this phase of his civilisation, that any effort to remedy the evils extant, by modification of current details, must still be long and difficult. That which is wanted is an entire and radical change. For the very young we want teachers who would shut up the schoolroom and would, if it were possible, take the school for instruction into that room the canopy of which is the blue heavens ; and who, instead of having holidays at fixed seasons, would make all youth a perpetual holiday. Such teachers in their rambles, and in quiet hours with their boys or girls around them, will repeat in simple language the great wonders of the past, the glories of the present, and the possibilities of the future. They will press no book into the unwilling hand, stimulate no brain into maddening exertion ; but will watch for indication of independent learning, and encourage that according as may seem to them discreet. They will consider the physical welfare of their

charges as equally important with the mental; assured that in a sound organism sound learning will ripen, but that in a diseased body there can be no greatness. By this method the child will be prepared for the work of youth, and for instruction by moderate self-application. It will naturally, and without effort, learn to speak at least one language, and to read and write one. It will learn endless natural facts, and will pass to further studies with a mind free for the admission of best impressions, and rich in simple and useful information, on which anything good may be built. Thus ready for its second course, it will run the rapid race to the height of learning, strong of heart and of brain. Unworn by previous cares, and untrammelled by unnecessary fetters imposed in childhood,—which, thrown off never so determinedly, leave their deep scars and indents behind,—it will continue to learn first from nature as she is opened to the mind; but it will also venture to learn from books, which are in fact nature refracted, condensed, focussed by many eyes, and pictured in the condensed form and type by many hands. So it will glide into the stage of manhood or womanhood, when it may reason, and on sound knowledge lay the foundations of wisdom.

As it seems to me—and I speak from direct observation of the system in its practical working—the Froebel method answers very largely this description of teaching. If it does not take the young out into the fields to learn first lessons,—and in the crowded city and in our varying climate it cannot systematically do that,—it makes the schoolroom assimilate as nearly as possible to the outdoor existence. The child is taught through play. It begins to learn from the ball; it builds up its knowledge from toys of wood,—lines, angles, squares, figures, and letters; it learns the natural changes of the seasons in a merry dance; it is taught the modes of conducting trades, of travelling, of wandering over the different parts of the earth, in the same mirthful manner. It sails over the seas in its play, stops at various ports, and takes in merchandise as it goes. In this there is play, acquisition of learning, grasp, and delight. Then it moves to the modelling of figures and forms in clay, so that its hands are made to become obedient to its will; and if there be any genius for art talent in the mind, it is here likely to be fed. In a word, I know nothing better for the years of life from three to seven than the Kindergarten.

Some of you would like to ask me, perhaps, whether the Kindergarten, conducted on the strict German system, is entirely adapted to English wants and tastes. Candidly, I do not think it is. There is a social element, a Celtic element, in the English school which is not so prominent in the German, and which requires to be thought

of in education. This element is more active, spirited, shall I say boisterous, than the Teuton and Jewish, and it requires to be sobered down by some slight impress of actual lesson as the fifth year is approached. There might therefore, I surmise, be introduced into the English school a little more reading and writing—a change which would conform also with English tastes. Again, I do not think the term Kindergarten a good one for England. The English people do not understand what it means, and if they do, it is still foreign to them. There is a national dislike, if not a national prejudice, against terms that are of foreign sound. I should suggest, therefore, that in this country the Kindergarten should be called the *Child's Garden*, or, better still, the *Garden School*.

The objection often made, that the garden element of teaching—teaching actually in the garden—cannot be carried on in England, is true and not true. We cannot, strictly speaking, go out with children into a garden for many months in the year; but in our largest towns and cities there is all the lost space on the roofs of our houses, which space, enclosed on a flat surface, would form for schools the best artificial gardens that could be made. Wherever the photographer can place a studio for catching the rays of the sun, the teacher can place a garden for his garden-school. Thus upper London might soon be converted into garden schools, and nearest to the sky in all the place, the sunlight might be utilised for flowers of both worlds, the beautiful plant and the highest animal.

My task for this time is done. I support the Frœbel system of education on its merits. I would support it further as a check on that deathly destruction of all true learning which is now going on in our colleges, schools, and families, which is oppressing our youth of both sexes, killing genius, making the thoughtless frivolous, the thoughtful commonplace, and preparing all for nothing above mere stagnant mediocrity.

As I close the page, and recall what Frœbel has accomplished, I would add a final word relating to the work of our own great school-reformers in this same direction. To the late Mr. Hill of Birmingham, and to that most remarkable of remarkable women, the *Mater docentis* of modern England, Mary Carpenter,—whose life Miss Hart has so well written,—we can never feel too grateful. Be it our duty to follow them in sustaining an education for the young that shall elevate the nation by its simplicity, its usefulness, and its virtues.

BENJAMIN WARD RICHARDSON.

SOME ANIMAL BIOGRAPHIES AND THEIR LESSONS.

PART II.

FROM the crustacean array we may next select a form which, whilst it resembles the Barnacle in many of its features, and especially in development, is yet sufficiently distinct to lead towards forms presenting greater differences in the adult stage and yet exhibiting close identity in the early phases of existence. Such a form is the Sacculina (Fig. 13), the type of Crustaceans of the very lowest grade, and which live an attached, rooted, and parasitic existence on fishes or on other crustaceans. If a barnacle exhibits "retrograde development" or physiological backsliding, in that it appears to be a lower and more modified form when adult than when in the pupa-stage, the Sacculina and its neighbours exhibit a still more degraded condition. The organism just named exists as a sausage-like bag attached to the bodies of hermit-crabs. There exist no traces of a mouth—or, as Fritz Müller remarks, "they lose all their limbs completely, and appear as sausage-like, sack-shaped, or discoidal excrescences of their host, filled with ova (or eggs); from the point of attachment closed tubes, ramified like roots, sink into the interior of the host, twisting round its intestine, or becoming diffused among the sac-like tubes of its liver. The only manifestations of life which persist in these *non plus ultras* in the series of retrogressively metamorphosed crustacea, are powerful contractions of the roots, and an alternate expansion and contraction of the body, in consequence of which water flows into the brood-cavity and is again expelled through a wide orifice."

Now, the history of Sacculina-development clearly proves its relationship with other crustaceans. As an adult, a Sacculina might literally be anything in the way of animal organisation. It is a bag filled with eggs, and attached by roots to a hermit-crab. As such, its true nature is not recognisable by any of the deductions to be drawn from the ordinary facts of animal structure. Development, however, not only shows us its descent, but settles its place in the animal scale by declaring its affinities, not only with the

Barnacles, but with other crustaceans. From each egg contained within the bag-like body there is developed a little free-swimming creature (Fig. 16). This embryo possesses an oval body, ending in two short processes; three pairs of swimming feet are developed; a single eye may or may not be present; but we find in the young Sacculina a clear and unmistakable reproduction of the "Nauplius" (Fig. 14) of a Barnacle. No mouth or digestive system, however, exists in the youthful Sacculina, which shortly changes into the "pupa" state (Fig. 15, c). Here it closely resembles the *Cypris*—water-flea (Fig. 11, B), whose development we shall presently note. It possesses a shell folded down at the edges



FIG. 16.
YOUNG SACCULINA.

so as to enclose the body; the front pair of limbs, as in the Barnacle, become modified to form organs of attachment; the two remaining pairs of feet are cast off; and, as in the Barnacle, six pairs of forked swimming feet appear on the body behind, while the forked tail is also a characteristic feature of the young Sacculina. Then succeeds the stage of attachment. The front feet, or feelers, serve as means of fixation to the body of the crab-host; the remaining six pairs are cast off; the roots are developed from the feelers, and the animal thus assumes the adult sac-like and degraded form. Thus a Sacculina and its parasitic neighbours closely resemble barnacles up to the pupa-stage. At this point the evolution—manifested in "degradation"—of the Sacculina intervenes, and the six pairs of feet, which in the Barnacles are converted into the "cirri" or "plumes," are cast aside as useless; whilst the process of extreme modification for a life of parasitism as effectually moulds the remaining features of the organism in the characteristic ways of Sacculina life—namely, as the sausage-like sac, fixed to its crab-host. There can be no question, that Barnacle growth and Sacculina development run in strictly parallel grooves.

Allusion has been made to the likeness exhibited by the "pupæ" of the Barnacle and Sacculina to the perfect and adult form of those water-fleas which, like *Cypris* and *Daphnia* (Fig. 11, B, C), are familiar tenants of our fresh waters. The development of the "water-fleas"—under which general name very diverse beings are included—is highly instructive, in that it leads us to note how the community of development existing among Crustacea extends its roots so as to include every group or order of that class within its limits. The *Cypris* (Fig. 11, B) and its neighbours are known by their possession of a distinct

bivalve shell—that is to say, a shell consisting of two pieces, united along the back by a membrane serving as a hinge. Two or three pairs of feet exist, but these creatures appear to swim chiefly by aid of the tail. Now, the young Cypris leaves the egg as a “Nauplius” with three pairs of limbs. It possesses, like the Barnacle-nauplius, a single eye, and it appears to develop a shell likewise. The adult condition is attained in due course, with the production of the bivalve shell; and the three pairs of limbs of the “Nauplius” are converted respectively into the greater and lesser pair of antennæ and into the mandibles or jaws of the adult. The other feet of the full-grown Cypris are also developed in its later stages of growth, which are manifested by frequent moultings of the skin. A young Cypris therefore resembles a young barnacle in its Nauplius-form, and in the transformation of its anterior limbs into antennæ or feelers, which, in the water-fleas, serve the purpose indicated by the latter name—or may even be used for swimming, as in the *Daphnia*, or “branch-horned water-flea” (Fig. 11, c). In the correspondence between the bivalved Cypris and the pupa Barnacle or pupa Sacculina, we may possibly discover, likewise, the ultimate point of divergence between these diverse groups of Crustaceans.

Other water-fleas, such as *Daphnia* and *Cyclops* (Fig. 11, c, A), present variations in their early history from the chronicle of Cypris development. The Cyprides are perhaps the least modified of the water-flea race; this conclusion being supported by the greater complexity of other water-fleas as well as by the course of development of the latter. The anatomical investigation of a *Cyclops* presents us with an oval body or carapace (Fig. 11, A), bearing a single eye; with two pairs of feelers, big and little; with a jointed tail, forked at its tip; and with five pairs of swimming feet. In *Cyclops*-development a singular resemblance is presented to that of certain low

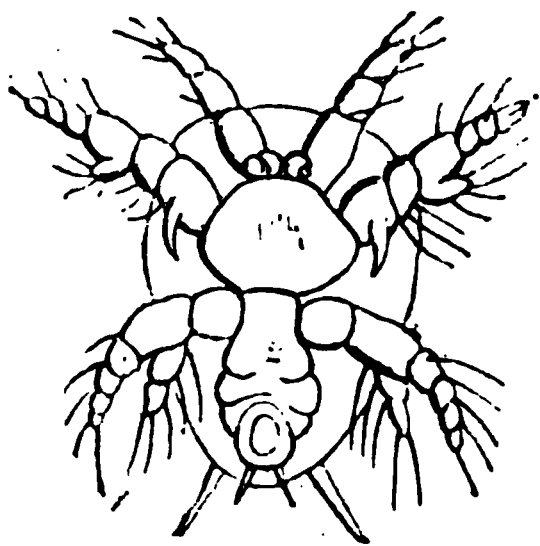


FIG. 17. NAUPLIUS OF CYCLOPS.

crustaceans parasitic on fishes: and it will be instructive therefore to compare these early stages in both groups. The first stage in *Cyclops*-history (Fig. 17) repeats the now familiar Nauplius, with its oval body, its central eye, and its three pairs of legs. Next are developed the chest and tail regions; and six feet appear as the belongings of the latter. Then appears another pair of limbs; and the three limbs of the Nauplius become the greater and lesser pairs of feelers, and the great

jaws, as in Cypria. After a series of moults, the outlines of the Cyclops-body begin to be apparent; but it is worthy of remark, that beyond the stage in which the tail-region with its six feet is developed, those lower and parasitic crustaceans—the fish-lice just referred to—do not pass. The further history of Cyclops is simply a record of moults and the growth of new joints and appendages; that of the fish-lice is a history of retrogression. The fish-lice are represented by such forms as *Lernæocera* (Fig. 18), or *Chondrocanthus*, which latter in its maturity may be found sometimes by the dozen in the gill-chamber of that ungainly fish the Angler or Fishing Frog (*Lophius piscatorius*). *Lernæocera* presents us, as an adult, with a shapeless flattened body, about half an inch long, possessing the merest rudiments of limbs. Each fish-louse begins life as a Nauplius (Fig. 18, B), exactly resembling that of the Cyclops water-flea (Fig. 17). It develops to resemble still more thoroughly the after-stages of Cyclops, but retrogresses therefrom and becomes modified for a parasitic life. Still more marked is this modification in other fish-lice (*Actheres* and *Lernææ*) which resemble Cyclops as closely as does *Chondrocanthus*, but which, sooner or later, become worm-like or otherwise degraded. The suppositions, entertained by competent authorities, firstly, that the fish-lice (Fig. 18) and water-fleas of the Cyclops-type (Fig. 11, A) have sprung from the same stock; and secondly, that the fish-lice are simply Cyclopean beings degraded by the adoption of parasitic habits, are therefore fully warranted by a consideration of the plain facts presented to us in their development. Or once again, to state a cardinal proposition of Evolution—the passing development of individuals repeats and reproduces, with modifications, the fixed and past development of the race and class.

To trace in full the record of Crustacean development would considerably exceed the limits which the patience of the reader might

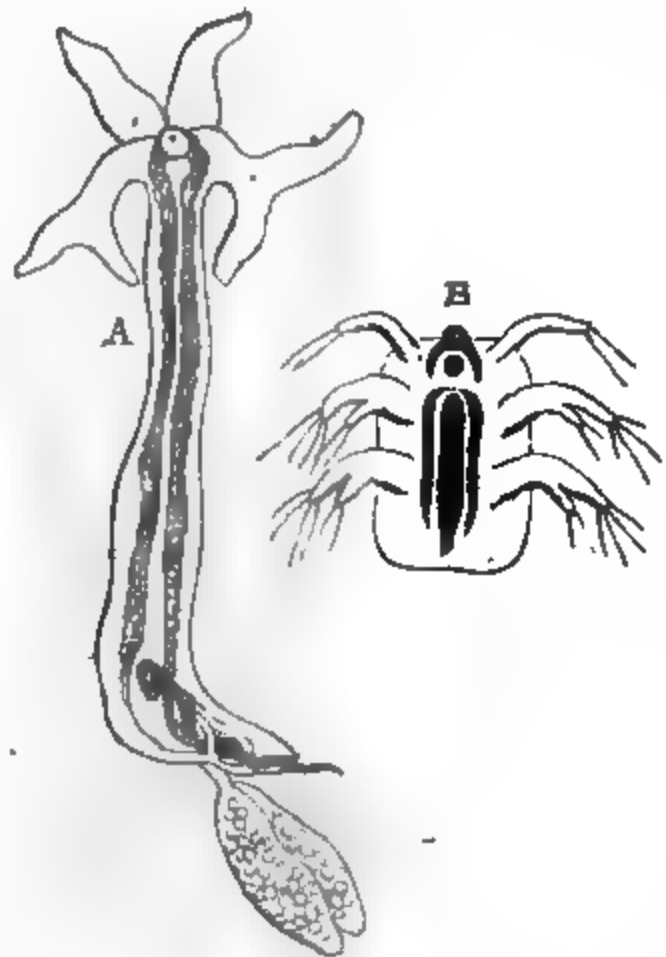


FIG. 18. FISH-LOUSE AND ITS NAUPLIUS.

bear, and would unnecessarily protract and repeat facts already exhibited and illustrated by the life-histories just recorded. It might



FIG. 19. KING CRAB.

be highly profitable, for instance, to trace the development of those peculiar Crustaceans, the King Crabs or *Limuli* (Fig. 19), which, as living forms, stand well-nigh alone in their class, and remain connected with other Crustaceans, only as the leaves on the extremities of one branch of a tree may be said to be connected with those at the tip of another and widely divergent bough. These crabs at one stage of their development, and before leaving the egg—within which all their notable features are acquired—present a most remarkable resemblance to certain of those singular fossil crabs (Fig. 20), the Trilobites (*Prestwichia*), and likewise at another stage to the larva of

certain other Trilobites (*Trinucleus*). This resemblance is well seen on comparing the larva of the King Crab (Fig. 21, B) with the larval Trilobite (A); and still more striking is the resemblance between the King Crab at a later stage (Fig. 22) and the adult Trilobites (Fig. 20). Thus, whilst the Trilobite-race

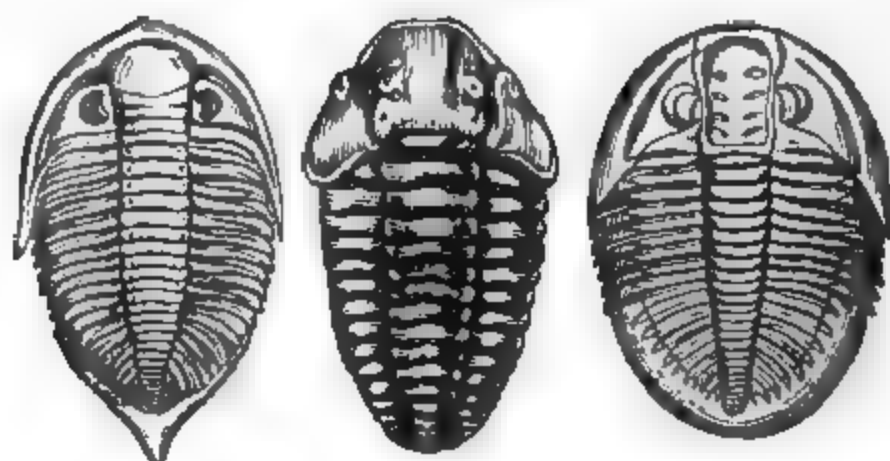


FIG. 20. TRILOBITES.

and their neighbours (*Eurypterida*) of Silurian age have died out of existence, the King Crabs, springing presumably from the same root-stock, have undergone modification as descent proceeded along "the files of time," and remain to present a crab-race of an age and type, compared with which our existing crabs are but as creatures of yesterday. So also we might, did space permit, strive to show that those curious creatures, the Brine Shrimps (*Artemia*) (Fig. 23, a) of the Lymington salt-pans and the Great Salt Lake; the Fairy Shrimps, which, like Crustacean ghosts, flit through our fresh waters; or the

curious *Apus*, with its sixty pairs of feet, begin life each as a Nauplius (Fig. 23, *b*), bearing either two or the statutory three pairs of limbs.

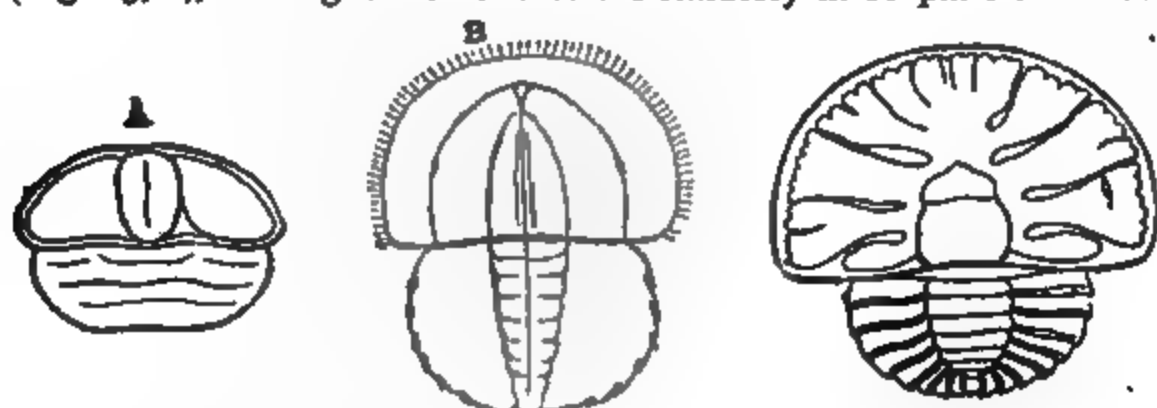


FIG. 21.

LARVÆ OF KING CRAB AND TRILOBITE.

FIG. 22.

And the account of other Crustaceans in which (as in the woodlice tribe) the Nauplius-stage is passed either within the egg or is altogether suppressed, might similarly bring again before our

mental view the operation of the laws and principle of modification. It may, however, suffice, if, in drawing Crustacean history to a close, we select a few examples of development from the highest and most specialised group of the class—that of the Crabs, Shrimps, Prawns, &c. In such

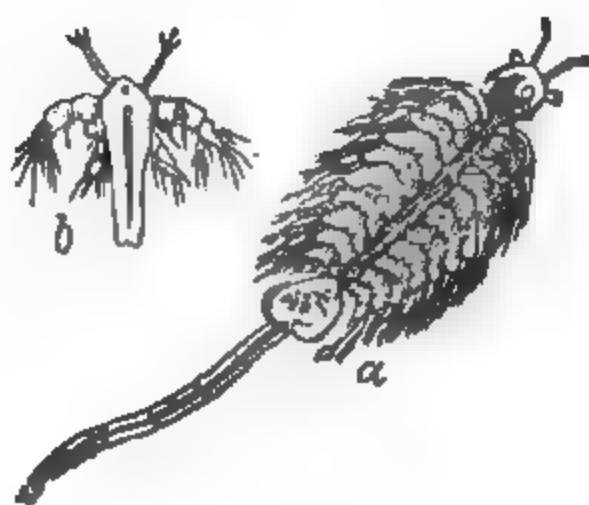


FIG. 23. BRINE SHRIMP AND YOUNG.

a history, we may discover the important fact that, notwithstanding modification, and despite the high specialisation of these latter animals from the primitive types and root-stock of Crustacea, their community of descent with that of all other members of the class is proved by those clues and traces which, all-insignificant as they may appear to the ordinary observer, literally afford to the zoologist proofs and confirmations of the strongest character of the truth of the theory of descent.

The higher Crustaceans (or *Decapoda*, as they are called), including the Crabs (Fig. 10), Lobsters, Shrimps, Prawns, &c., as their typical representatives, present us with a sufficiently diverse group of beings viewed as adults, and likewise afford illustration of equal diversity in their development. Such diversities may be well observed in the comparative study of the early history of such a series of forms as is presented by the lobsters and crayfish, by certain shrimps, and by the common crabs. In its development, the crayfish

apparently presents but little that is remarkable, as compared with Crustaceans of lower nature. Both crayfish and lobster come from the egg (Fig. 24) in the essential guise of their species or race ; and the free-swimming "Nauplius-stage," so universal amongst lower Crustaceans, is apparently unknown in their life-histories. There is

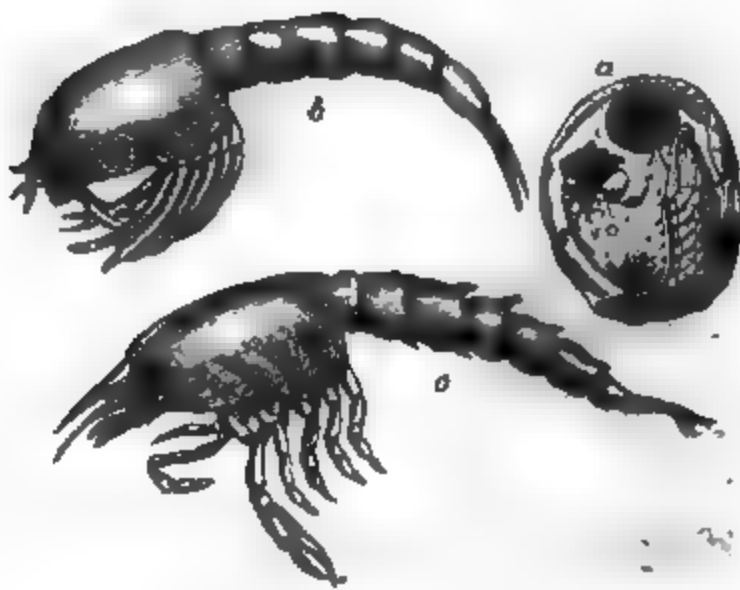


FIG. 24. DEVELOPMENT OF LOBSTER.

clear evidence, at the same time, to show that a "Nauplius" condition is represented in the egg-development, but that this phase is obscured and modified presumably through those causes and conditions which have placed the lobster and crayfish amongst the aristocracy of the Crustacean class. Speaking

of the development of the Crayfish and of its 'Nauplius-stage,' Huxley says, that animal "is wholly incapable of an independent existence at this stage, and continues its embryonic life within the egg-case; but it is a remarkable circumstance that the cells of the epiblast (or outer layer of the body) secrete a delicate cuticula, which is subsequently shed. It is as if the animal symbolised a Nauplius condition by the development of the cuticle, as the foetal whalebone whale symbolises a toothed condition by developing teeth which are subsequently lost and never perform any function." And again, speaking of the Crayfish, Huxley says : "In this Crustacean, in fact, it would appear that the process of development has undergone its maximum of abbreviation." As already remarked, the progressive advance and evolution of a group must naturally include in their course, changes and modifications in development as part and parcel of the higher order and structure to which the advancing members of the group attain. It is not surprising, therefore, to find that the crayfish or lobster (Fig. 24) should evince an absence in their development of those phases and repetitions of their ancestry, of which their lower and more primitive neighbours, the barnacles, &c., present such typical examples. Whilst, at the same time, it is equally notable and interesting to discover that in Nature's process oft-repeated exceptions prove the rule; and that here and there, the exceptions to the ordinary development of higher Crustaceans

certainly prove that their original way of evolution has lain through the pathways so plainly marked out in the lower ranks of the class. Such exceptions occur within the family circle of the crayfish and lobster kind; and are even represented in the early history of that most familiar of Crustaceans, the common crab itself. This animal possesses a life-history which, whilst it presents striking analogies to that of lower Crustaceans, likewise offers some interesting points of difference from the development of the latter animals. Within the

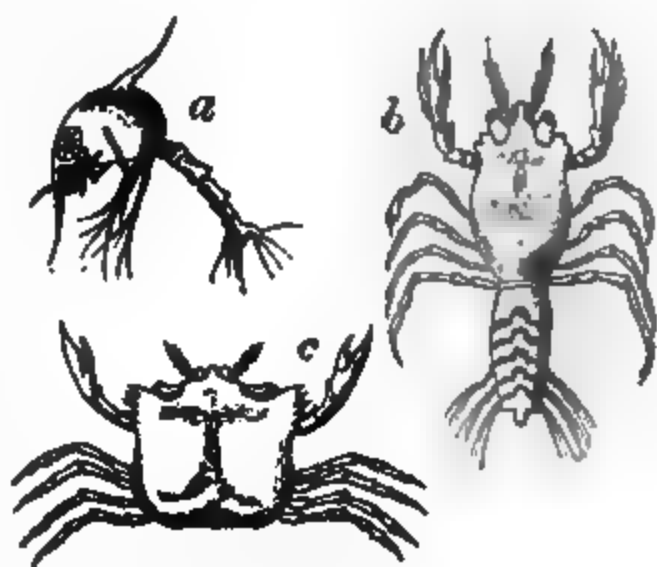
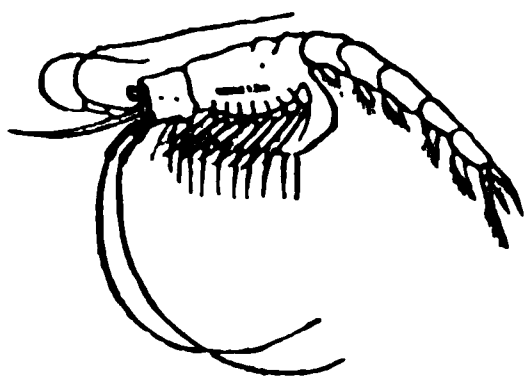


FIG. 25. DEVELOPMENT OF CRAB.

egg, as in the case of the crayfish, the youthful crab appears to pass its Nauplius-stage, and sooner or later it emerges upon the world of waters in a form with which our previous researches have not made us familiar. The young crab (Fig. 25, *a*) possesses a short body, which at first sight appears like a huge head, and a jointed tail. In front and above are spinous projections, the upper of which reminds one of the end of a nightcap long drawn out. A single and simple eye is placed between two very large compound organs of sight; four antennæ or feelers exist, and three pairs of jaws—this young being thus presenting us with the complete furnishings of the head of the adult. There likewise exist traces of appendages which represent foot-jaws in the full-grown crab, but the jointed tail possesses no addenda or belongings save bristle-like processes attached to its broad and divided extremity.

In 1778 there was figured by a Dutch naturalist a new form of Crustacean which was met with in 1822 in large numbers in the Cove of Cork by Mr. Vaughan Thompson. These beings were referred to a genus *Zoëa*, which had been constructed for their reception. Later research, however, showed that the *Zoëas* were merely the young or larval crabs, just described, and the further development of the *Zoëas* was in due course satisfactorily traced. For, after repeated moults, the *Zoëa* becomes the *Megalopa* (Fig. 25, *b*). Its body has now assumed a shape distantly resembling that of the mature crab, and its five pairs of walking legs are well developed. It possesses, however, an appendage, unknown in the adult crab, in the shape of a jointed tail provided with appendages; and as the *Megalopa*, the crab bears a

very decided resemblance to one of its tailed neighbours, such as the lobsters or shrimps. Ultimately the body widens, after further moultings ; the tail decreases in size, loses its appendages, and becomes tucked up under the body, to form the characteristic little "purse" of the adult crab ; and, finally, with the proportional growth and development of other regions and parts, the features of adult crab-life (Fig. 25, *c*) are duly produced. Thus a crab's body really consists of a greatly broadened head and chest, and the jointed tail we see in the lobster or shrimp is represented in mature crab-existence by the little appendage or "purse," which, on examination, will be found to bear rudiments of the appendages so typically de-

FIG. 26. *MYTIS*.

veloped in the long-tailed neighbours of the crab. It likewise becomes clear from the foregoing life-history, that the crabs, in respect of the modification and disappearance of their tail, are a later and higher race than the lobsters, shrimps, and prawns. And geology confirms this surmise, inasmuch as the lobster-races were

developed ages before the crabs. Fossil kith and kin of the lobsters occur very early in the stratified rocks, the crabs being late productions ; so that the idea of the crabs having originated from a tailed Zoëa-like or lobster-like race is fully supported by the best of evidence.

The concluding life-histories which may be glanced at, by way of summarising the ways of the crustacean evolution, are those of the *Mysis* or opossum-shrimps (Fig. 26), and a peculiar genus of prawns known as *Penæus* (Fig. 27). The first-mentioned animals are common in the lakes of modern Europe and of North America, and also flourish in the Arctic Seas. It is a warrantable inference that the *Mysis relicta* of the lakes is simply a variety of the *Mysis oculata* of the Arctic Seas, which has been shut off from a former marine existence by the conversion of the Baltic fjords or firths into lakes ; geological changes thus inducing alteration in animal species, and "a primitively marine animal" thus becoming "completely adapted to fresh-water life." These opossum-shrimps are so called because the young are carried during development in special sacs or pouches of the parent form. They present in their early history a very interesting connection between the marked change of form in lower crustaceans, and that direct development of the higher forms of which the crayfish is so well-marked an example. Within the egg *Mysis*, like the crab, passes through a Nauplius-stage. Thereafter, however, it grows rapidly ; and a remarkable circumstance has to be chronicled, namely, that the

original skin or integument remains unaltered, and is not moulted or otherwise made to participate in the succeeding growth of the body. In this feature, as Huxley remarks, the young opossum-shrimp might be justly compared to the pupa or chrysalis of an insect, since it lies, like the latter, within an enveloping skin from which, in due course, the young shrimp emerges. Here, then, the Nauplius-stage is represented as a fleeting period in development; and we see in the Mysis, when full grown, a being which has no gills, which possesses a large tail or abdomen, and a small body (or head and chest), and which has but rudimentary appendages to its tail. Notwithstanding the fact that the development of the Mysis is well-nigh direct, we must not neglect to note the important facts, firstly, that one of its nearest relations (*Euphausia*) actually leaves the egg as a true Nauplius; and secondly, that the form and figure of the adult Mysis itself is perfectly reproduced in the development of the crustaceans of higher type.

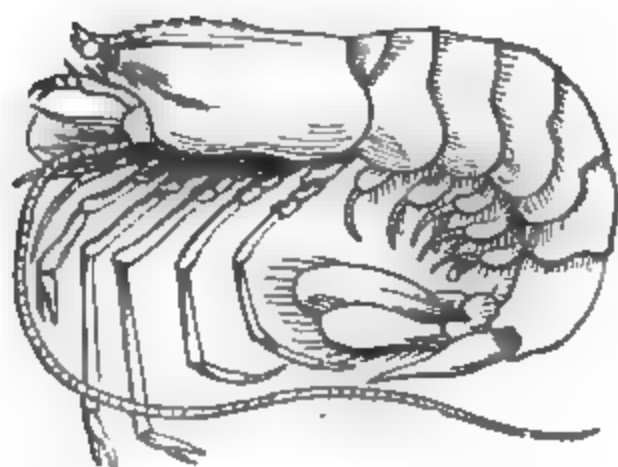


FIG. 27. *PENÆUS*.

Thus in the lobster, which so nearly resembles the crayfish in its direct development (Fig. 24), and in its imperfectly represented "Nauplius-stage," the young form (named the Zoëa from its analogies to the youthful stage (Fig 25, *a*) of the crabs), passes through a Mysis-stage, but thereafter develops into the mature lobster, with well-developed tail-appendages and "head." The idea that in the adult Mysis we may see represented a transitory phase in the evolution of such higher forms as the lobster and crayfish, is a justifiable assumption; and it is one, moreover, which appears to be fully proved by the study of the life-history of that division of the prawn tribe which includes the species of *Penæus* (Fig. 27) as its representatives. The prawns, as every one knows, are intimately associated with the lobsters, shrimps, and crayfish as higher crustacea. Yet the first appearance of *Penæus* is

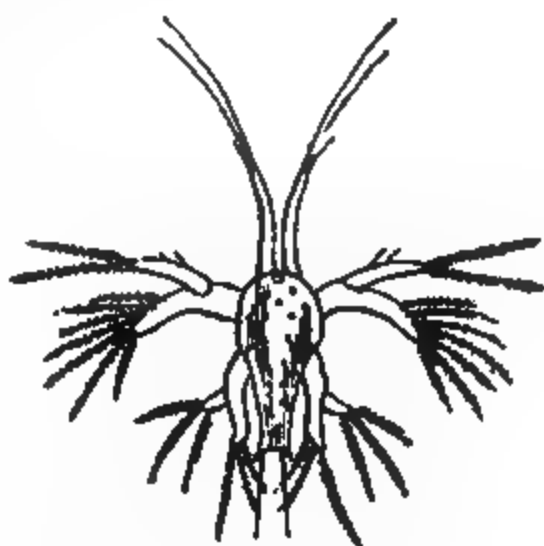


FIG. 28. NAUPLIUS OF *PENÆUS*.

not, as in the crayfish, as a well-nigh perfectly-formed animal, nor, as in the lobster (Fig. 24), as a Zoëa, somewhat like the adult; nor yet, as in the crab, as a Zoëa (Fig. 25 a), widely different from the mature form. On the contrary, the youngest stage of *Penæus* is a veritable "Nauplius" (Fig. 28), with three pairs of appendages, and a single median eye, accurately reproducing the features now familiar to

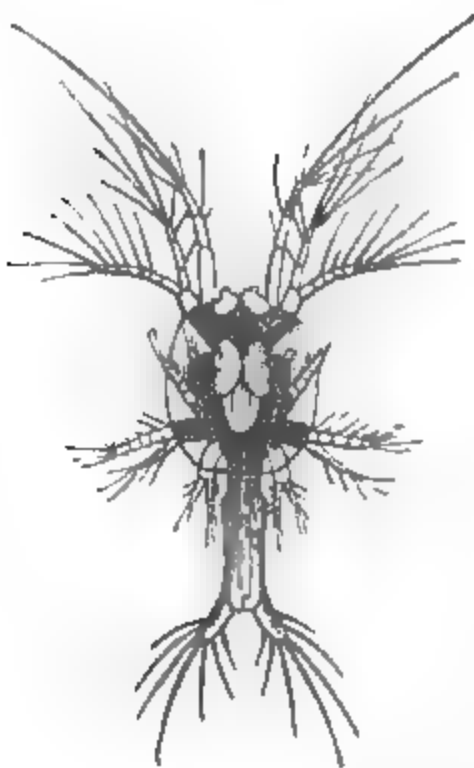


FIG. 29. ZOËA OF *PENÆUS*.

us in the Barnacle (Fig. 14), Sacculina (Fig. 16), and lower crustacean life (Fig. 18, B) at large. Next in order, this Nauplius develops a rounded body-shield (or carapace); the first and second pairs of appendages becoming the two pairs of feelers proper to all crustaceans, whilst the third pair becomes the chief jaws or "mandibles." Next are developed four pairs of feet, converted in due time into jaws and foot-jaws; and then appear behind these other five pairs of appendages which become the ten walking feet. The six joints of the tail have as yet no appendages, but the tail itself ends in two tufted processes, and we see the Zoëa-form (Fig. 29) thus limned out; whilst no less remarkable is the resemblance of the young prawn at this stage to an adult *Cyclops* (Fig. 11, A) water-flea. Two stalked eyes, in addition to the single eye of the Nauplius, appear in the Zoëa-form, which alters and changes through the decrease of the feelers, till now used for swimming. The tail increases in size and replaces the feelers in function; and the feelers, each at first double, become single-jointed organs. The five feet of the chest-region are each provided with two terminal joints, and the Zoëa becomes thus modelled (Fig. 30) into the exact form of a Mysis or opossum-shrimp (Fig. 26). Finally, the single and median eye disappears, the outermost of the two end joints of each of the chest-limbs disappears, leaving these walking legs (seen so plainly in shrimp, prawn, crab, and lobster) of single conformation; gills are developed within the chest, sense-organs appear, and the full development of the prawn (Fig. 27) is then completed. Throughout these varied stages it is not difficult to trace a panoramic succession of forms accurately reproducing the existing degrees and forms of the crustacean class. The early Nauplius (Fig. 28), the zoëa or water-flea stage (Fig. 29), the mysis-form (30), each produced in

definite and advancing succession, present us with a perfect picture of the evolution of the prawn-race from lower crustacean life, and, presumably also, of the evolution of all other crustaceans belonging to the same rank and series in the class.

In summarising the results to which a study of the development of the echinoderms and crustaceans leads, there is to be recognised the operation of the principles already more than once insisted upon in the preceding pages, namely, that community of descent is provable by likeness in development, just as differences or obliterations and alterations in development are explicable on the grounds of adaptation and change acting concurrently with the evolution and progress of the race. Only by taking into account these two principles can the hard ways of development be understood. The present subject is one which may be regarded as lying thoroughly without the province and power of any explanation not founded upon evolution and upon the idea that progressive change is part and parcel of the order of nature. And, admitting that the only feasible explanation of these curious phases of development is to be found in such an idea of nature's constitution, it seems folly to deny that the general weight of evidence in favour of descent more than counterbalances any difficulties which may present themselves in connection with the exact determination of the lines along which that descent has travelled. That larval or young forms are themselves liable to modification from various circumstances must be admitted. This variation (seen in the insect-class) of the young form, which we regard as representing the primitive stock of the class, must unquestionably complicate the study of evolution and add to the difficulties of constructing a perfect pedigree of the living world. The *Pluteus* larva of a sea-urchin and the *Bipinnaria* larva of a starfish, thus differ in respect that the former possesses a limy framework which is wanting in the latter. But such distinctions do not in the least degree militate against the primary fact underlying all such developments, namely, that the likenesses, not merely of young forms, but in adult structure, are explicable only on the theory of a common origin. Indeed, with the best of reason and logic, it may be argued that, as a condition of evolution, we postulate the

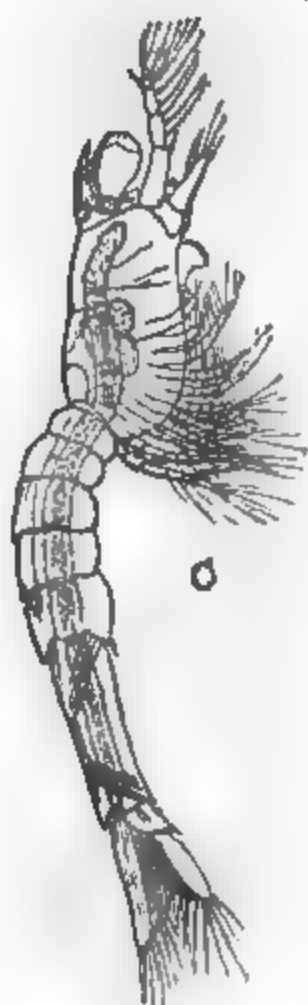


FIG. 30.
MYSIS-STAGE OF PENAEUS.

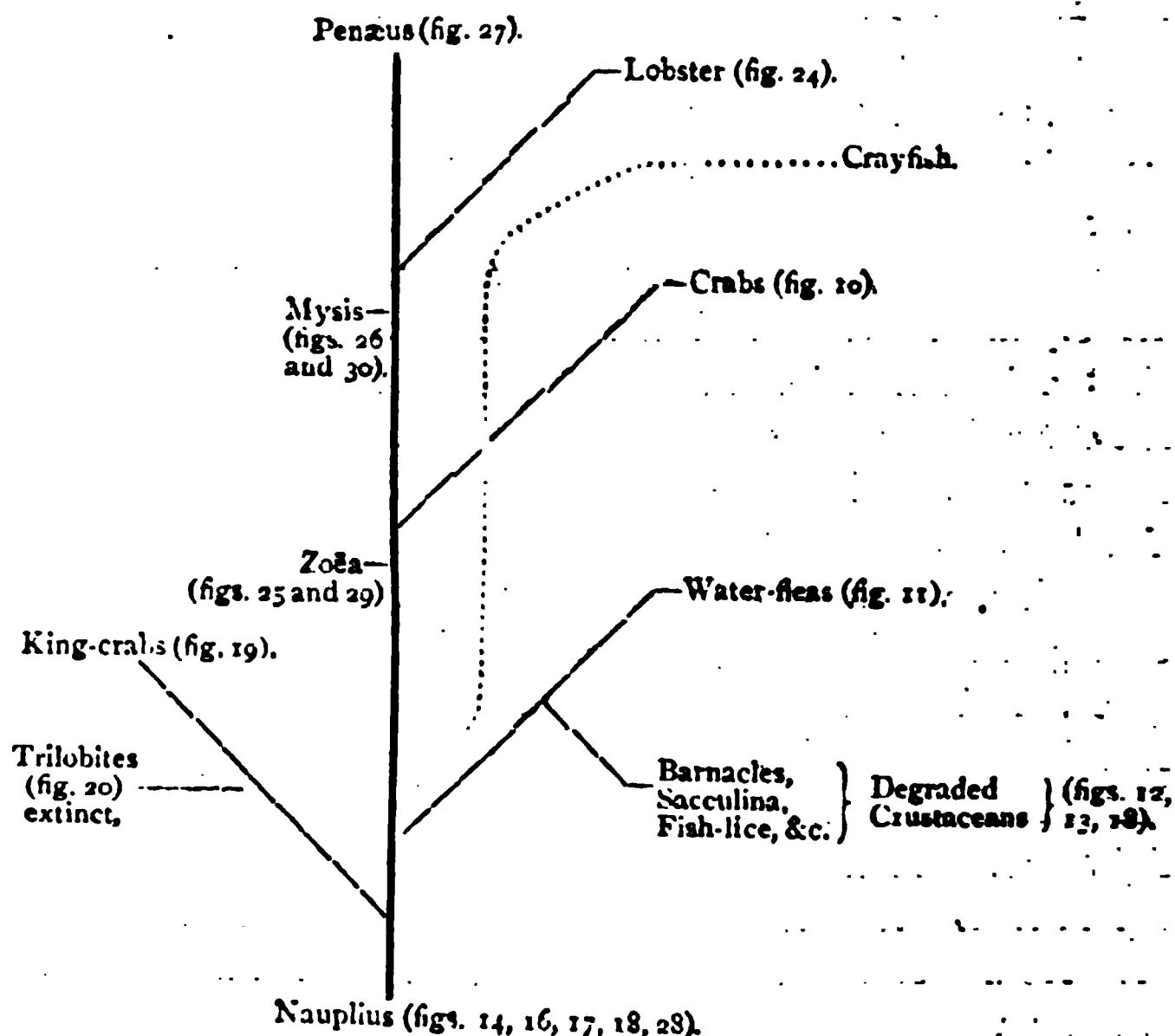
occurrence of variations in the young stages as well as in the adult form—just as we should legitimately expect to find in living horses the rudiments of those toes which the ancestors of the existing equine race possessed. Thus “direct” development, such as we have seen to occur in some starfishes and sea-cucumbers, whereby the young pass directly into the form of the adult, and wherein the changes of structure and appearance are suppressed, is a result of the adaptation of the larvæ to new ways of life. Rejecting this view, we should have to fall back upon the anomalous position of maintaining that there existed for one echinoderm a law of special creation, and for another a law of descent—a supposition which no logical mind will accept, and which the grander idea of the uniformity of nature at once dispels. As a final remark in connection with the sea-urchin class and its transformations, we may add that the changes in form are themselves progressive in nature. The five existing groups of this class (sea-urchins, starfishes, sand-stars, sea-lilies, and sea-cucumbers) are unquestionably modifications of a common plan of structure, and they originate from a larva which is wonderfully similar throughout, if we consider the diversities of adult structure which arise therefrom. Further, if this larva were to be arrested in its development and to represent a mature form in such an arrested stage, it would present a striking resemblance to some of the lower worms and their allies; this fact alone pointing to the probable beginnings of the sea-urchin class in a worm-stock. No less clearly do we see in the varying degrees of organisation exhibited by adult echinoderms, the same proof of progressive advance and modification of an originally primitive type. The forces and powers which, before our waking eyes to-day, evolve a sea-urchin from its egg and easel-like larva, or a starfish from its bipinnaria, are, if we will only consider the wonderful nature of the transformations involved, engaged in as evident and intricate a work of evolution as those which have developed the varied twigs and branches of the Echinoderm tree in the æons of the past.

The foregoing conclusions find, perhaps, plainer illustration in the history of the crustacean class, wherein exists a uniformity not so clearly traceable—although its original existence may not be doubted—in the early life of the echinoderms. The highest members of the crustacea are, as we have noted, the lobsters, cray-fishes, shrimps, crabs, and their allies. We have seen that in the crayfish a “Nauplius”-stage is represented; that in the lobster a Zoëa-phase is seen; that Mysis likewise exhibits a Nauplius, and then settles down as a peculiar form; that in the crab’s early history, a still better marked Zoëa appears; and finally, that the shrimp *Penæus* actually passes through

a Nauplius phase, a Zoëa or water-flea stage, a Mysis form, and finally assumes the likeness of the shrimp tribe. The history of Penæus, therefore, is an abridged treatise of the evolution of all higher crustacea : its development, to parody Pope's line, is "not one, but all Crustaceans' epitome." And as perfectly are the facts of lower crustacean life correlated with those of the higher development of the class. A water-flea, like Cyclops, as an adult, matures its development and ceases to progress at a stage corresponding to that at which Penæus has but attained its youth. The barnacles and sacculinas exhibit the influence of conditions of parasitism acting at a definite stage in the course of ordinary development, and producing the degraded and attached form of the adults. Mysis advances so far on the way towards the lobster and crayfish type, but stops short in its development at a point represented in lobster history, and beyond which the lobster itself passes as we have seen. Finally, beyond all such stages, and underlying all the variations and obscurities even of the higher and most modified life-histories, we see the Nauplius-form continually appearing as the starting-point of all crustacean history ; or as that point, to use Fritz Müller's expression, which represents the "extreme outpost of the class, retiring furthest into the grey mist of primitive time." The Nauplius appears before us, then, as the founder of the crustacean race. The Zoëa is a modification and advance upon the Nauplius ; and from this Zoëa (as proved by Penæus-development) was evolved the higher crustaceans at large. The lobsters and their allies (again appealing to Penæus) were evolved from the Zoëa-form through an intermediate stage represented to-day by the Mysis or opossum-shrimp ; whilst the short-tailed crabs, in all probability, arose directly from the zoëa, without the intervention of a Mysis-stage, seeing that in their development they exhibit a distinct Zoëa-stage, and do not pass through a Mysis-stage like the lobsters and their long-tailed neighbours.

Diagrammatically expressed, we may see in the history of crustaceans that tree-like arrangement of their pedigree which best illustrates the deductions of evolution. The Nauplius exists at the root of the class. Developed in direct line, we find Penæus passing through the Zoëa and Mysis-stages. The lobster branch diverges after the Mysis-stage has been attained, and the crabs depart from the main stem before the latter phase. The crayfish, with its obliterated Nauplius-stage, may be presumed to have followed the course of development resembling that of the lobster ; its history, however, being singular in respect of the obliteration of the inter-

mediate stages. The king-crabs have presumably originated in the common Nauplius-form, and have passed through the Trilobite-form, now extinct, to their present position at the extremity of an isolated branch of the crustacean tree; whilst the barnacles, fish-lice, and water-fleas, obviously nearly allied, spring from a distinct Nauplius-stem, but diverge through different ways and paths of life—the former to exist mostly as degraded parasites, and the latter to develop into active free-swimming forms. Thus becomes clear to us the meaning



of those singular changes in animal forms which puzzled the older naturalists. To question the meaning which evolution attaches to them is to leave them without explanation or meaning. Our knowledge of the full evolution of the Crustacea or any other animal group, as already remarked, may be, and often is, far from perfect. We are, it is true, still in the "grey mists" of many biological subjects, and the pedigree of animals, amongst others, is still enveloped in much obscurity; but, at the same time, we can detect breaking through the mist, gleams of knowledge—bright forerunners of that flood of light which the research of after-years will assuredly bring.

ANDREW WILSON.

MRS. CANDOUR.

GARRICK at one time busied himself about an Infant School of Actors ; children from their earliest years were to be trained to the service of the stage, specially instructed in histrionic art and the accomplishments necessary to theatrical success. The plan made some progress, if it was unattended by important results. In December, 1756, Garrick produced at Drury Lane his farce of "Liliput," founded upon the first book of "Gulliver's Travels." "The piece was acted by boys and girls all tutored by the manager, and the parents of not less than a hundred were most liberally rewarded." Murphy adds that the author had further a moral object in view ; he hoped that "at the sight of such diminutive creatures adopting the follies of real life, the fashionable world would learn to lower their pride, and the dignity of vice would be lost." It is not to be believed, however, that Garrick laid much stress upon the didactic quality of the production. "Liliput" was excellently represented by the children and was frequently repeated. And two of the young performers—and but two—became afterwards known to fame, and took rank among the mature members of the company. A character called Lord Flimnap was personated by a Master Cautherley—a son of Garrick's, so people whispered—who acquired some favour at a later date as a hero of domestic tragedy, playing George Barnwell and like parts, and obtaining from his fellows the designation of "the Gentle Cautherley," which, perhaps, does not say much for his force as an actor. And a character called Lalcon, "Gulliver's keeper," was admirably sustained by a Miss Pope, a little girl of twelve or so, whose career upon the stage, commenced thus early, did not terminate until the year 1808. In 1761 Churchill was applauding her still girlish efforts :

With all the native vigour of sixteen,
 Among the merry group conspicuous seen,
 See lively POPE advance in jig and trip,
 'Corinna, Cherry, Honeycombe, and Snip.
 Not without art, but yet to nature true,
 She charmed the town with humour just, yet new.
 Cheered by her promise, we the less deplore
 The fatal time when CLIVE shall be no more.

Miss Pope was the original representative of Sheridan's MRS. CANDOUR in 1777, and of his Tilburina in 1779. Charles Lamb wrote of "charming natural Miss Pope, the perfect gentlewoman as distinguished from the fine lady of comedy;" referred to "Churchill's compliments still burnishing upon her gay Honeycombe lips;" and dwelt upon "the true scenic delight, the escape from life, the oblivion of the consequences, the holiday barring-out of the pedant Reflection, those Saturnalia of two or three brief hours well won from the world," afforded by the performance of "The School for Scandal" in its best days. Hazlitt remembered her as "the very picture of a Duenna, a maiden lady or antiquated dowager . . . more quaint, fantastic, and old-fashioned, more pert, frothy, and light-headed, than anything that can be imagined." And only a year before her retirement from the scene Leigh Hunt described Miss Pope as "the only natural performer of the old gentlewoman . . . in true comic humour, and in temperate, unaffected nature, yielding to no actress upon the stage."

Jane Pope was the daughter of a respectable tradesman who carried on his business in Great Russell Street, Covent Garden. Apparently she obtained her only theatrical education in Garrick's Infant School; she served no apprenticeship in the provinces, she never strolled to learn her art, gather confidence and experience; but within a very few seasons of her first essay as a child in "Liliput" she was enrolled as a permanent member of Garrick's company, charged with the duty of impersonating pert hoydens and saucy chambermaids. When in 1859 Vanbrugh's "Confederacy" was revived, the performance was sufficiently remarkable. The playbill announced that the parts of Brass, Dick, Moneytrap, Clarissa, and Flippanta would be sustained by King, Palmer, Yates, Mrs. Pritchard, and Mrs. Clive; that Tate Wilkinson would attempt the character of Mr. Amlet; and that, as Corinna, "a young gentlewoman" would appear for the first time. The young gentlewoman was Miss Pope, whose success was very great. Mrs. Clive, indeed, thought it well to warn the beginner that the hearty applause she had received was not wholly due to her merits, but arose in some part from the good nature of the audience. "You acted very well," said the actress of experience; "but in future you must endeavour to act better, and to be content with less applause, otherwise disappointment will be in store for you; be prepared for the capriciousness of the public; do not allow it to damp your spirits, or you will fail to do yourself justice." These sage counsels of the veteran were listened to patiently and gratefully by the recruit; Mrs. Clive and Miss Pope became firm friends. Dolly Snip, in "Harlequin's Invasion," described in the

playbills as "A Christmas gambol in the manner of the Italian comedy," and presented after a performance of "George Barnwell," was the next part allotted to the young actress—who, as all agreed, acquitted herself admirably. This pantomime was contrived by Garrick, who found his materials in an older work produced at the Goodman's Fields theatre in 1741, where Garrick himself is alleged to have worn once or twice a harlequin's patchwork jacket. Harlequin is supposed to invade Parnassus and the kingdom of Shakespeare, to be expelled thence at last, however, with all his "fantastic train." The characters were not mute, but conversed freely; King, for the first time, playing harlequin, and Yates appearing as Snip, a tailor. The success of this entertainment led to its frequent revival. Even as late as 1820 "Harlequin's Invasion" was presented at Drury Lane, when Miss Pope's character of Dolly Snip was undertaken by Madame Vestris.

During the season of 1759–60 Miss Pope also appeared as Miss Biddy in Garrick's "Miss in her Teens," as Miss Prue in "Love for Love," as Miss Notable in Cibber's "Lady's Last Stake," and as Jenny in "The Provoked Husband." In the following season she played Cherry in "The Beaux' Stratagem," and was entrusted with an original character which she rendered specially famous—the heroine of Colman's farce of "Polly Honeycombe." The author aimed at satirising the readers of modern novels as distinguished from the old-fashioned romances, the prologue setting forth :

But now the dear delight of later years,
The younger sister of ROMANCE appears ;
Less solemn is her air, her drift the same,
And NOVEL her enchanting, charming name.
ROMANCE might strike our grave forefathers' pomp,
But NOVEL for our buck and lively romp !
Cassandra's folios now no longer read,
See two neat pocket-volumes in their stead ;
And then so sentimental is the style !
So chaste, yet so bewitching all the while, &c.

Polly Honeycombe is nearly related to Biddy Tipkin on the one hand and to Lydia Languish on the other. Indeed, Sheridan's comedy owes something to Colman's farce. Honeycombe's concluding speech—"A man may as well turn his daughter loose in Covent Garden as trust the cultivation of her mind to a circulating library"—probably inspired Sir Anthony Absolute's animadversion on the same subject. "Polly Honeycombe" became one of the most popular of afterpieces, and was always assured of a hearty reception so long as Miss Pope was willing to appear as the heroine.

But more ambitious occupation awaited her. Retaining her hold upon the romps and Abigails, she now appeared as certain of the fine ladies of the theatre, personating Lady Flutter in Mrs. Sheridan's new comedy "The Discovery," the widow Belmont in "The Way to Keep Him," and Araminta in Whitehead's "School for Lovers." When Garrick in 1765 made his first appearance after his return from the Continent, and "Much Ado about Nothing" was performed by royal command, it was to Miss Pope that the character of Beatrice was assigned, complete success attending her efforts. She undertook few other Shakespearian parts ; but she long continued to be a famous Audrey, and she appeared from time to time as Lucetta in the "Two Gentlemen of Verona," as Mrs. Page and as Katharine in the farce to which Garrick had reduced "The Taming of the Shrew." Into the tragic repertory or anywhere near it she never ventured ; but the excellence of her acting was thought to compensate for her imperfect singing when she attempted a musical character, and represented Lucy in "The Beggar's Opera."

Her list of parts was greatly extended upon the retirement of Mrs. Clive in 1769. Churchill's prediction was verified : the loss of that actress was less deplored in view of the admirable art, the abundant humour, of Miss Pope. She now played Flippanta instead of Corinna in "The Confederacy," Mrs. Frail instead of Miss Prue in "Love for Love," and was greatly applauded even in the most popular of Mrs. Clive's characters, such as Nell in the old farce of "The Devil to Pay," and Kitty in "High Life Below Stairs." She was advancing from the hoydens, the chambermaids, and fine ladies to the more mature gentlewomen of the drama. She appeared now as Mrs. Oakley in "The Jealous Wife," now as Lady Brumpton in "The Funeral," now as Mrs. Doggrel in "The Register Office," and now as Mrs. Sneak in "The Mayor of Garratt." In 1775 the term of her engagement with Garrick expired. She expressed a desire for its renewal with an increase of salary, "throwing herself upon Mr. Garrick's or the proprietors' generosity to name what addition to her appointment they might think her diligence deserved." Garrick in the name of the patentees acknowledged "not only her diligence but her merit," expressed a hope that she would continue for many years to come a member of the Drury Lane Company, but disregarded altogether her application for an increase of salary. The lady evidently felt herself much aggrieved, and wrote back in very tart terms. She presented her respects to the patentees; she was much honoured in their commendations both as to her merit and her diligence. For the former she had been infinitely overpaid by the public, "who had

ever shown her the greatest favour without a paragraph to prejudice them." Her diligence concerned the managers ; she looked to them to reward it. She demanded ten pounds per week, "the sum usually paid to actresses in her walk." She could not upon any other terms remain at Drury Lane. If the patentees objected, though she should quit the theatre with infinite regret, she was "determined to shake all affection off, and, like the Swiss, to perform only with those that pay best." The patentees, in reply, while expressing regret at losing Miss Pope, declined to increase her salary ; they wished her "every happiness that her change of place and sentiments could give her ;" Garrick, on his own account, professing that he had shown "a little more than *Swiss attachment* to Miss Pope." It was clear that Garrick was much offended ; the allusion to the press—the hint as to the creation of prejudice by means of paragraphs—was particularly disagreeable to him ; but with other members of the company Miss Pope believed that the manager, who was a shareholder in certain journals, employed his interest with the newspapers in conducting his theatre and controlling his players. Miss Pope quitted Drury Lane, but sought in vain occupation at Covent Garden. She soon perceived that she had acted rashly and hastily ; she longed to be back again in Garrick's theatre. Three months later she wrote to him, frankly acknowledging her error, and humbly imploring him to forgive her and to be still her friend. "I have no resource," she wrote, "but going to Ireland, which, though it prove advantageous, must render me miserable, as it separates me from my family, with whom I have ever lived in the most perfect affection. You will have the goodness to remember that this is the first disagreement we ever had in the course of fourteen years, and you will the readier pardon it when you consider that a little vanity is almost inseparable from our profession, and that I unfortunately listened to its dictates and have made myself unhappy." Garrick was obdurate, however ; he was steeled against the poor lady's touching appeal. He had made other arrangements ; he had prepared for her loss, distributed her parts among the other actresses ; he could offer her no re-engagement, &c. She went to Ireland, therefore, writing to him in the following year a sympathetic letter on his retirement from the stage. She acknowledged the service he had rendered it ; she could not be charged with flattery, she said, as every interested view was at an end between them from his having relinquished the theatre. She concluded : "I am not sorry this was my year of banishment, since it would have given me much greater pain to be present ; and though small was the fault which caused our separation, and severe

the penalty, yet believe me, you never had a sincerer votary." Could he resist this homage? He had retired from the active exercise of his profession, but he remained one of the patentees of Drury Lane Theatre. Already the staunch Mrs. Clive had addressed him on behalf of her "poor unfortunate friend Miss Pope," with a view to her re-engagement at Drury Lane. "By this time I hope you have forgotten your resentment," she wrote; and she proceeded to remind him that Miss Pope had been a faithful creature, on whom he could always depend, certainly a good actress, amiable in her character, "both in her being a very modest woman and very good to her family, and to my certain knowledge has the greatest regard for you." She concluded: "Now, my dear Mr. Garrick, I hope it is not yet too late to reinstate her before you quit your affairs; I beg it, I entreat it, I shall look upon it as the greatest favour you can confer on your ever obliged friend, C. CLIVE."

At length Garrick yielded. Mrs. Clive's appeal was not to be resisted, or he was roused to a more complete sense of the value of Miss Pope's services. Personally he owed her much. Not only had she played Beatrice to his Benedick, and Cherry to his Archer; she had sustained characters in several of his own plays, and greatly contributed to their success. She was re-engaged upon her own terms. She had formerly received eight pounds per week only; she was now accorded ten pounds. It was not a particularly liberal salary, even for those days. The whole quarrel had arisen upon a question as to an extra forty shillings per week for an excellent actress and a great public favourite! Without doubt, Garrick had been needlessly despotic in dealing with the lady.

Miss Pope had now grown somewhat portly of form, as her critics soon began to remind her; for the critics of the last century, from Churchill downwards, were quick to discover and denounce the personal defects and physical infirmities of the players. Hugh Kelly, in his scurrilous poem "Thespis," published in 1766, wrote of—

That shapeless form to grace so unallied,
That roaring laugh and manliness of stride,

and referred to Miss Pope's too hearty enjoyment of "scenes of turbulence and noise." A later satirist, in 1772, describing the actress as "Ten years ago a sprightly lass," demanded, "But will increase of flesh now let her pass?" But if she sometimes assumed characters for which her proportions and aspect unsuited her, it was always at the request of her manager, and generally with the consent of her public. In 1777 the part of Mrs. Candour was allotted

her. James Smith, one of the authors of "Rejected Addresses," has suggested that if "The School for Scandal" had been brought to the theatre by "some starved hackney sonneteer," Parsons would not have acted Crabtree, and Dodd would have been fined rather than perform Backbite. "I even doubt," he continues, "whether Baddeley would have taken to the Jew, and Miss Pope would have unquestionably demurred about Mrs. Candour. Not that those parts are bad in themselves, but there is too great an interval between the first and last appearance of the scandalous club. They get out of sight, and consequently out of the mind of the audience. Moreover—an inexpressible sin in the perception of a player—there are better parts in the play." But the author was also the manager, and his company could scarcely decline to support the comedy: a cast of great strength resulted. Miss Pope's success as Mrs. Candour was most decided. In certain theatrical circles the actress soon acquired the private alias of "Mrs. Candour," because she had been the first to play that part, and also because of her readiness to undertake the defence of any one who chanced to be attacked. At the same time James Smith wrote: "Not a particle of wrong or sarcasm was mingled with her encomiums. I never heard her speak ill of any human being. . . . I have sometimes been almost exasperated by her benevolence. In cases of the most open delinquency, I could never entice her into indignation. 'I adore my profession,' I have heard her say more than once." And she would tolerate no censure of any of its members.

She was a little quick of temper, however, as her correspondence with Garrick demonstrated; and in his *Reminiscences* Michael Kelly has narrated how upon a particular occasion the lady stormed and raged and vowed vengeance against him! There had been a revival, it seems, of Shakespeare's "Jubilee," originally devised by Garrick; an absurd sort of pageant with personifications of the Tragic and the Comic Muse—Mrs. Siddons and Miss Farren assumed these characters in 1787—and a grand procession of the Shakespearian characters appropriately costumed and sundry of them wearing masks. In this production Miss Pope was accustomed to appear as Beatrice, with Kelly—who was more a singer than an actor—as her Benedick. They entered and walked or rather danced across the stage, by way of representing the comedy of "Much Ado about Nothing," and of paying homage to Shakespeare, and were rewarded with the cordial applause of the spectators. But one night, as Kelly writes, the comedian Moody "came to me and requested I would lend my domino and mask to a friend of his who wished to see the audience

from the stage, and who would do exactly as I did, having frequently seen me and Miss Pope. On he went, but appeared instantly planet-struck and stood perfectly still ; nor did he move until pushed off. The rage and disappointment of Miss Pope, who was an excellent dancer, and I not a very bad one, at not receiving the applause which she had always brought, was very great." It was with difficulty the wrath of the actress could be appeased. Kelly addressed her a humble letter of apology, and she was persuaded at length to write him a friendly answer, admonishing him to be careful how he yielded a second time to bad advice ; " and to the day of her death," concludes Kelly, " she was kindly attentive to *me*, but she never forgave Moody at whose instance I had transgressed."

Miss Pope's repertory of parts was most extensive. In her period the "standard comedies," known only by name to our modern playgoers, still retained possession of the stage, and the time had not yet come for Charles Lamb's lament that Congreve and Farquhar showed their heads once in seven years or so only to be exploded and put down instantly. Audiences were still tolerant of the licence, the levity, the dissoluteness, which helped so largely to constitute Lamb's dearly loved "artificial comedy," if here and there might be discovered critics beginning to think that the wit and humour of the old plays was surely insufficient to keep them sweet much longer, and that after all it *did* matter a little "whether Sir Simon or Dapperwit stole away Miss Martha, or who was the father of Lord Froth's or Sir Paul Pliant's children." Miss Pope appeared from time to time as Foible in "The Way of the World ;" as Edging in "The Careless Husband ;" as Lady Lurewell in "The Constant Couple ;" as Mrs. Clermont in "The Tender Husband ;" as Clarinda in "The Suspicious Husband ;" as Olivia in "The Plain Dealer ;" as Patch in "The Busybody ;" as Phædra in "Amphitryon ;" now as Lady Dainty and now as Lady Froth in "The Double Dealer ;" as Lady Dove in "The Brothers," and Mrs. Racket in "The Belle's Stratagem," &c. &c.

In 1779 Miss Pope was to be received with uproarious applause when she trod the stage the first representative of Tilburina in "The Critic." She caricatured the conventional heroine of high-flown tragedy, and, trailing her long skirts of white satin about the stage, duly went stark mad amid the heartiest laughter of the audience. Puff was amply justified in demanding, "Do you ever desire to see anybody madder than that?" She further served Sheridan by appearing in his other plays ; now as Lucy in "The Rivals," now as Mrs. Malaprop, and now as the Duenna ; but she was not, of course,

the original representative of those characters. Upon the first production of "The Clandestine Marriage" in 1766, she had appeared as Miss Sterling, and she remained for many years in possession of the part; but in 1802, by express command of George III., who greatly delighted in her acting, Miss Pope for the first time personated Mrs. Heidelberg. The comedy had soon to be withdrawn, however, for King, the original Lord Ogleby, was retiring from the stage, and a competent substitute for him could not be found. In 1796, in support of Charles Kemble's "George Barnwell," Miss Pope accepted the inferior part of Lucy, with an understanding that the great Mrs. Siddons would also condescend upon the occasion and undertake the character of Milwood. In 1805 Miss Pope played Mrs. Candour, to find herself the last survivor of the original cast. All her old playfellows had departed; the time for her own leave-taking drew near. In 1807 Leigh Hunt noted that her "powers of voice and of action" were weakening, although her sense of humour remained as strong as ever, and she was still able to entertain highly, because of the soundness of her histrionic method. The stage was as her own apartment, her bearing was so easy and natural, she indulged in no excess of action, she never seemed to address herself particularly to the spectators, her manner was emphatic but without exaggeration, and she was especially commended for the skilful management of her voice. This was said to be peculiarly observable in her Mrs. Candour, "where her affected sentiments are so inimitably hidden by the natural tones of her voice that it is no wonder that her scandal carries perfect conviction to everybody around her." In 1806 she appeared for one night only as Lady Minikin in Garrick's farce of "Bon Ton," a part she had first undertaken in 1775. In the following year she was seen for the last time upon the stage. "The Heir-at-Law" was presented for her benefit; she played Deborah Dowlas, and she personated her old character of Audrey in delivering her farewell address.

Her friends lamented her decision to undertake so poor and unsuitable a part as Deborah Dowlas on the occasion of her last benefit. She had not before assumed the character; it was altogether new to her. Did ever actress before, it was asked, learn a new part for her last appearance on the stage? Moreover, she had to accomplish the arduous task of saying good-bye to a public she had known so long and served so faithfully. She consulted her friend James Smith as to the dress she should wear as Deborah. He advised black bombazeen. It had been usual to dress the character very showily indeed, with a sort of vulgar splendour. But Smith declared

that all the *dramatis personæ* should properly be clad in suits of sable. The Dowlasses would all be in mourning as relatives of the deceased Lord Duberly. As his son, Henry Moreland would also wear black ; while Steadfast, a friend of the family, would assume complimentary mourning. Custom would require Doctor Pangloss, LL.D. and A.S.S., to be attired in black. Miss Caroline Dormer, having lost her father, and Cicely and Zekiel Homespun being in like plight, would all three be in mourning ; while Kendrick, Miss Dormer's Irish servant, would probably don a black coat by way of showing sympathy with his mistress's distress. Miss Pope was not convinced, however, by this statement, and resolved to dress Déborah after the fashion adopted by her predecessors in the part. The farewell address, delivered in the character of Audrey, was written in verse. One line of it only—"And now poor Audrey bids you all farewell"—seems to have survived. Long afterwards James Smith found it dwelling in his memory.

Miss Pope lived many years—forty, it is said—on the south side of Great Queen Street, within two doors of the Freemasons' Tavern. On summer evenings, when the windows were open, the clattering of knives and forks and the jingling of glasses greatly disturbed the serenity of Miss Pope's back drawing-room—especially when, as James Smith suggested, the toast of "Prosperity to the Deaf and Dumb Charity" was duly honoured at the Freemasons'. Old-fashioned portraits adorned the walls : here was seen the face of the beautiful Mrs. Oldfield, the actress ; here was pictured a corpulent gentleman in a pearl-coloured suit, with a laced cocked hat under his arm : Holland, the actor, denounced by Churchill as a mere imitator of Garrick—"I hate e'en Garrick second-hand." When, in her old age—a sexagenarian, unwieldy of figure, and endowed with ample "duplicity of chin"—Miss Pope grew garrulous, she was prone to descant upon the one romance of her life, the explanation of her celibacy ; she told the story of her early love and disappointment. "Mr. Holland and myself," she would say, "were mutually attached. I had reason to expect that he would make me an offer of his hand. Mr. Garrick warned me of his levities and his gallantries, but I had read that reformed rakes made the best husbands, and I hoped I should find it so. One day I went to visit Mrs. Clive in the Richmond coach, which stopped to bait at Mortlake, when whom should I see pass me rapidly in a post-chaise but Mr. Holland in company with a lady ! I felt a pang of jealousy which kept me silent the rest of the journey. I left the coach at the King's Head, near the present bridge, and with my little wicker-basket in my hand

I set off to walk along Twickenham meadows to Strawberry Hill. When I came opposite the Eel-pie Island I saw the same parties in a boat together, and I then discovered that Mr. Holland's companion was the notorious Mrs. Baddeley. He looked confused when he saw me and tried to row across to the Richmond side, but the weeds prevented him. I met him on the Tuesday morning following at a rehearsal. He had done wrong, and he knew it, but he assumed an air of *hauteur*. I was as proud as he, and from that time we never exchanged a word. He afterwards made love to this, that, and t'other woman, but I have reason to know that he never was really happy." Her tears fell as she told her story, though it dealt with events that were forty years old. Holland died of small-pox at the early age of thirty-six, so far back as 1769; a tablet to his memory, with an inscription by Garrick, being placed in the chancel of Chiswick Church.

At Mrs. Clive's Twickenham cottage—"Little Strawberry Hill," or "Clive-den," as Horace Walpole was wont to style it—Miss Pope was a frequent visitor, usually passing a month with the retired actress during the summer vacation when Drury Lane was closed. She journeyed to Twickenham by the passage-boat rowed by Thames watermen. On one occasion, as she related, to while away the time after passing Vauxhall, she took a book from her pocket and began to read. The boatmen were disappointed; they knew her to be the popular comic actress, Miss Pope. "Oh, ma'am," said one of them, "we hoped to have the pleasure of hearing you talk." There was no resisting this simple homage. "I took the hint," said the good-natured lady, "and put away my book." Of the superfine Horace Walpole Miss Pope frankly avowed her opinion: "He *could* be very pleasant, and he could be very unpleasant." In what way? she was asked. "Oh, very snarling and sarcastic." She often met him at Mrs. Clive's tea-table. She shared in the old-fashioned pleasures of Little Strawberry Hill—its little supper- and card-parties, when Mrs. Clive managed to carry off at quadrille such "miraculous draughts of fish," as Walpole said. Then there were the saunterings in the tiny garden, or across the meadow, or down the green lane, which had been cut for her use between the cottage and the common, and which it was humorously proposed to call Drury Lane. The actresses were both very portly of figure, while Mrs. Clive owned so rubicund a complexion that when her face rose at Strawberry Hill Lady Townshend declared it made the place quite sultry. When Hounslow Powder Mills blew up, Walpole, to give an idea of the terrible nature of the explosion, declared that

it "almost shook Mrs. Clive." But the lively parties at Cliveden, composed of "people of quality," not less than of players, artists, authors, and even parsons, came to an end in 1785 upon the somewhat sudden death of Mrs. Clive. Walpole had been playing cards with her but three days before, when he found her, as he writes, "extremely confused and not knowing what she did." He had seen "something of this sort before, and had found her much broken." She caught cold attending the funeral of General Lister, and was confined to her room for a day or two. "She rose to have her bed made, and while sitting on the bed with her maid by her, sank down at once without pang or groan." However, she was in her seventy-fifth year. She was buried in Twickenham churchyard, Miss Pope writing the epitaph engraved upon a mural tablet, and commencing, "Clive's blameless life this tablet shall proclaim."

Very soon after her retirement from the stage Miss Pope quitted Great Queen Street for Newman Street; it was no longer necessary for her to live so near the theatre. Mr. James Smith writes of an evening party she gave at her new residence within twelve months after her retreat from Drury Lane, when she entertained many distinguished guests, some even from "the purlieus of St. James's Palace," as her friend curiously describes it. "Here," he adds, "I beheld her in society for the last time. She shortly afterwards was attacked by a stupor of the brain; and this once lively and amiable woman, who had entertained me repeatedly with anecdotes of people of note in her earlier days, sat calmly and quietly in her arm-chair by the fire-side, patting the head of her poodle dog, and smiling at what passed in conversation, without being at all conscious of the meaning of what was uttered. At her death I promised to myself to write her character in one of the public journals, and at her funeral I vowed to myself to write her epitaph. But, as Dr. Johnson says, 'the promises of authors are like the vows of lovers.'" James Smith's narrative is incomplete, however. Miss Pope resided no long while in Newman Street. She removed thence first to No. 25, and afterwards to No. 17, St. Michael's Place, Brompton; dying there on the 30th July 1818, as Mr. Crofton Croker has recorded in his "Walk from London to Fulham." She survived her retirement from the stage some ten years.

Miss Pope—our Mrs. Candour and Tilburina—formed a connecting link between the eighteenth and nineteenth centuries in their relation to theatrical history. Many of the most memorable of dramatic events occurred within the period of her prolonged career. Born within a year or two of Garrick's first appearance at Goodman's

Fields, she became his devoted pupil and playfellow, a faithful member of his company during many years. Garrick gone, she rendered valuable service to Sheridan and the Kembles, witnessed their rising and setting, and lived to the time of the coming of Edmund Kean, and even of Macready. Her earliest efforts obtained record in the "*Rosciad*;" she was the last survivor of the players enumerated by Churchill; her later performances were noted by Lamb, Hazlitt, and James Smith, and by their junior, Leigh Hunt, who saw his first play in 1800, and lived to 1859. James Smith, who survived until 1839, had seen Miss Pope play *Flippanta* in "*The Confederacy*," a part she first assumed in 1769. Leigh Hunt has left mention of her Mrs. Candour; her *Lady Courtland* in Miss Chambers's "*elegant comedy*," as it was the fashion to call it, "*The School for Friends*;" and her Mrs. Malaprop. James Smith held her *Widow Racket* in "*The Belle's Stratagem*" to be one of her best parts, and noted that "her usual manner of exhibiting piquant carelessness consisted in tossing her head from right to left and striking the palm of each hand with the back of its fellow, at the same moment casting her eyes upward with an air of nonchalance." Miss Mellon, it seems, adopted something of Miss Pope's manner in this respect. Leigh Hunt dwells particularly upon the artistic moderation and excessive naturalness of her acting. "She never," he writes, "passed those limits at which the actor's adherence to the author ends, and his mere wish to please the audience commences." He mentions "her precise bit of a voice and genuine humour, . . . her perfection of old-gentlewomanly staidness;" notes that "with features neither naturally good nor flexible, she managed a surprising variety of expression;" and concludes: "with perpetual applause to flatter her, and a long favouritism to secure her, she had no bad habits; and, when even the best of our actors are considered, it is astonishing how much praise is contained in that simple truth."

DUTTON COOK.

OUR KINSHIP WITH RUSSIA.

IN these days of Russophobia, when Englishmen are apt to look upon the country which extends over more than one-half of Europe as the habitation of a race of people more closely akin to the savage hordes of Asia than to the civilised nations of the West, it is well to consider the fact that there exists a bond of kinship which unites Russia firmly with the rest of Europe, and separates her distinctly from Asiatic connections—in fact, knitting her into the political framework of the West.

Every one knows how, during the eighth and ninth centuries of our era, there came from Denmark a great wave of Northmen, spreading itself over the west of Europe, by which new life and vigour was infused into the countries which came under its influence.

There came Guthrum the Dane to England ; there came Rolf the Ganger to France ; and later on there came William the Norman to England, and Robert the Wizard to Sicily ; and in each case they came with the same characteristics, and in each case their influence developed itself after the same fashion. Whether in England, France, or Southern Europe, the Danes assimilated themselves to the habits and customs of the country they had subdued. Rolf the Ganger became French ; his descendant, William, transformed himself from a Frenchman into an Anglo-Norman ; and their followers likewise, whilst supplanting the old nobility, became essentially French and English themselves.

In each country these Northmen developed a high taste for art, culture, and commerce—Rouen, Winchester, and Monreale, near Palermo, testify to this—and whilst conquering, they became conquered by the manners and customs of those they subdued ; yet at the same time they infused new life and vigour into every branch of the community.

This was the great Western wave which had its origin in Denmark. At the same time, and from the same source, went forth an Eastern wave of conquest, which exhibited the same features, and accomplished exactly the same results throughout the East of Europe.

The continuity of this wave is less easy to trace, its annals are more disjointed and more buried in legendary lore.

I purpose now to examine the sources of information available for tracing this line of conquest, and to show how the Danish Chersonese, like a closed-up fan, gradually expanded from right to left, and spread an influence over the whole of Europe which united all the countries therein by a common bond of union, and on the shores of Southern Europe did Norman shake hands with Norman, unconscious probably of their common origin.

The place from which the most authentic information can be derived respecting the progress of the Northmen in the East is a small island lying about sixty miles off the coast of Sweden, and commanding the entrance to the Gulf of Finland and the mouths of all the great Russian highways of commerce, namely, the Neva, the Niemen, and the Dwina. Hence this island of Gotland was by nature situated as a stepping-stone for commerce and migration east and west. And in these days it is replete with reminiscences of the past ; coins of every dynasty from the Caspian to England are constantly being found there ; runic stones, relating to early travel, cover the island ; and, moreover, a large store of legends are found thereon, which remain pure and unadulterated by their complete isolation, and assist us materially in our research.

Let us now visit this island, and gather together what legendary lore can be substantiated by natural facts and the sequence of events respecting this Danish wave of migration, which tarried here on its way to Russia.

Gotland in early days was known only as a fitful, restless island, which occasionally appeared and then vanished from the sight of men. It was called the Baltic's Eye (*Östersjöns öga*). It would never be stationary, they said, until some mariner landed and lighted a fire thereon.

There came one Thjelvar, the delver, the industrious, says the saga of Gotland, the son of Guti from Jutland, who left his Danish home with a large body of followers, in search of a dwelling-place, since his native land was crowded to excess. He kindled the necessary fire on the island, and from that day it vanished no more.

It is easy to reconcile this legend with facts. Gotland is an extremely low-lying island, nowhere rising more than 200 feet above the level of the sea ; and in those days it must have been even lower, for the waves are gradually retreating therefrom, and on the coast are seen tiers of high-water marks, which have been left high and dry by this gradual retreat of the ocean.

It was the superstitious custom of the day to light fires on a newly-colonised spot, to drive away trolls and other evil spirits from the habitation of men. Here we have the legendary colonisation of Gotland by Danes from Jutland, and there are ample proofs to this day of the Danish origin of its inhabitants. Though now under the Swedish crown, Gotland for generations belonged to Denmark; the dialect of Scandinavian spoken thereon leans more to Danish than to Swedish; whilst in remote spots on the island, Danish pure and unmixed is still spoken; coins, too, of Danish sovereigns prior to the period of Knut the Great are constantly dug up there, and many other facts could be adduced to prove the intercourse between the early colonists and their native country.

When settled in his new country, Thjelvar, we are informed by the Saga, called the island Gutland, after his father. The legend then relates how the island soon became too small for all the emigrants, a portion of whom sailed to Esthonia, and from thence down the Dwina, through Russia, until they came to the land of 'the Greek Emperor, or the Black Sea, where they remained, and their descendants lived, speaking their own language and serving the Byzantine Emperor.

On the Crimea existed a district called "La Gotia," until the days when the Genoese were driven out of the Chersonese by the Ottoman Turks, twenty years after the fall of Constantinople.

Thjelvar's wife, soon after his arrival in Gotland, presented him with three sons at a birth, and the island became quickly populated; the three sons of Thjelvar were given the command of the three provinces into which Gotland was divided, and which divisions are retained to this day; and as years rolled on, and the increase of the population demanded further emigration, a third part of the Gotlanders was chosen by lot to seek a home elsewhere, and this third part was entrusted to the command of three brothers, who led them across the Baltic to seek a home on the Russian continent.

At a date identical with this emigration alluded to by the Saga, there appeared in Russia, at the invitation of the Slavs of Novgorod, three Scandinavian brothers—Ruric "the peaceful," Sineous "the victorious," and Trouvor "the faithful," together with their warriors and families, "who took up their position on the borders of the territory they were summoned to defend."¹

We will now for a while leave Gotland and its emigrants, to return to it later, and look elsewhere for information to substantiate these statements. There appeared at Constantinople, in the ninth and

¹ Nestor, Russian Annalist.

tenth centuries, certain warriors, whose tongue was Scandinavian ; they became the emperor's Varangian guards, and fought for hire in the Greek army. They called Constantinople Tzargard (the emperor's gard or enclosure, cf. our yard), and five times in two centuries the Northmen tried to capture it ; in fact, the notion of Eastern conquest was of purely Scandinavian origin. The fierce northern ambition drove Oleg to hang up his shield on the golden door of Byzantium, and Oleg was no more a Russian, in our acceptance of the word, than Richard Cœur-de-Lion was an Englishman.

Luitprand, Bishop of Cremona, alludes to these Northern warriors as "called '*Russi*' by the Greeks, though they were in reality Normanni."¹

Procopius also speaks of them, and tells us that they came from that mystic Northern island called "Ultima Thule," and at the same time leaves no shadow of doubt as to their Scandinavian origin. Since, then, we have the emigration spoken of in our Gotland Saga substantiated by this statement in Procopius, is it not rational to suppose that his Ultima Thule was not England, as some imagine, and was not the mainland of Scandinavia, as Swedish archæologists would have us believe, but was, in point of fact, the island of Gotland, from which Thjelvar's comrades and descendants, as the Saga tells us, had migrated eastwards ?

More especially does this theory hold good when we come to consider the intimate connection which existed in the ensuing centuries between the commercial isle of Gotland and the Greek empire, a connection of which other Scandinavian countries have but few traces, while Gotland is full to overflowing.

Many are the theories respecting the origin of the Varangian guard at Constantinople, and the Varangian dynasty which ruled over Russia for several centuries. Their Scandinavian ancestry is undoubted ; etymologists generally give as the derivation of the name the Swedish word "*vara*," to protect, or the Danish *være* ; but the Danish "*værge*," a guardian or protector, seems to answer more closely to the various forms of the word which we find—namely, the Vargrians, the Varangians, and the Varinges.

Latin annalists called them "*fœderati*," which would imply that they bound themselves by some contract ; in fact, their position in the rotten empire of the East seems to have been much the same as that of the various free companies which played so prominent a part in the warfare of mediæval Italy.

Concerning the name "*Russi*," which was given to them by the Greeks, we have a satisfactory derivative in the old Scandinavian word "*Ros*," signifying a horse, which would imply that they were a mounted body of warriors. Curiously enough, to this day, in Gotland, the word "*ros*" is used to denominate a horse, long after it has fallen into disuse in the rest of the North, except in the compound "*Hvalros*" or whale-horse, our "*walrus*."

It is singular, if this theory be accepted, to see the Empire of All the Russias bearing the name given to their "Norman" progenitors, a name consequently as suggestive as Normandy in France—whilst their Emperor bears the name of Cæsar, a name for which their ancestors fought.

In every way did the Russian Varangians show the types and characteristics of their brethren who spread over the west of Europe. The tomb of a Varangian chief near Tchernigof was lately opened, and it contained the bones and armour of a prince of the tenth century; his coat of mail and pointed helmet completely resemble the armour of a Norman warrior. The Russian princes we see depicted in early pictures are clothed and armed like the Norman chiefs in the Bayeux tapestry, whilst in our own days art has made identical representations of Ruric the Scandinavian warrior, the founder of the Varangian dynasty, in the monument raised to his memory at Novgorod, and of William the Conqueror in the monument at Falaise.

In the early treaties made by the Scandinavians in Russia, we learn that for some little time they did not cast off all traces of their own nationality. Their names are with few exceptions of Danish origin, and the most ancient guild statute of Novgorod the Great affords us a curious mixture of Scandinavian and Slavonic, showing the process of amalgamation much as the charters of the Plantagenets gradually grew out of Norman-French into English.

Thus did Ruric the peaceful, his brothers, and his descendants, throw in their lot with the country they had come to rule, but not before they had done for Russia what William the Norman and his followers had done for England. By them a new era of commerce, art, and prosperity was opened out for the Slavs, until at length the Scandinavian emigrants became as distinctly Slavonian as the descendants of the conquering Normans became distinctly English; and in describing the part they played in the formation of a Russian people, we might quote the early pages of English history. Their high-handed policy in the first instance was followed, as in England, by a development of national feeling in the towns. This was followed by a liberal grant of charters to boroughs, almost republican in their

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feeling, rich and flourishing in all branches of industry. But upon Russia there fell the horrors of a Tartar invasion, which put her back for centuries in her advances towards civilisation.

By taking a cursory glance at the fortunes of the commercial isle of Gotland in the early centuries of commercial development, when the crusaders drove much of the trading of the Mediterranean into the Northern channel, we shall be able to obtain a satisfactory idea of the abilities this eastern wave of Normans evinced both for commerce and art. For this small Swedish island is to-day as replete with reminiscences of former magnificence as are Rouen, Winchester, or Palermo; and in the churches of Wisby, in Gotland, we find the influence of intercourse with the Grecian Empire stamped on every building.

Profiting by the advice of their "countrymen settled in Russia," says the old Gotland Chronicle,¹ the islanders made rapid advances in commerce. Their ships traded down the Dwina, the Niemen, and Lake Ladoga, with the East, and brought back with them the skins, spices, and riches of Siberia, India, and Arabia. The importance of Gotland in the commercial world of this date is proved by the quantities of coins which are continually being dug up there. In the Museum of Wisby, the capital of the island, we see a better collection of early English coins than there is in the British Museum, especially about the time of Knut the Great, Etheldred, &c., when the Danish influence in England was strongest. There are coins of Thetford, York, Lincoln, Stamford, &c., mingled with Byzantine, Arabic, Persian, and other coins of this date.

In the architecture of the town of Wisby, most writers have found a puzzle. I will here quote from Fergusson's "Handbook of Architecture":

"The most striking peculiarity of the Gotland churches is the constant appearance of the pointed arch at a date earlier than we find it as a decorative feature in other parts of Europe. It may be, however, that the instances where it is found are additions or alterations of a later date, but the evidence is at least strong enough to merit a close examination. It is by no means improbable that in a city where coins of the Chalifs are constantly found, the pointed arch may have been introduced from the East at an earlier date than the Crusades, which seem first to have suggested its employment. . . . All the churches are small, like Greek churches. There does not seem to have been any metropolitan basilican or any conventual establishments, but an immense number of detached cells and chapels,

¹ Strelow.

scattered in groups all over the island, with very few that could hold a large congregation : perhaps a Greek plan, or a local peculiarity, we do not understand."

A visit to the ruined churches of Gotland at once opens one's eyes to the extent of the intercourse with the East : round churches and Gothic windows, each with a date verified by annalists, which long anticipated the first sign of Gothic in Western Europe ; richly decorated carvings in true Byzantine style, all of which things are a mystery, if we do not bear in mind how the enterprising Russi left their homes and travelled to Byzantium, and transmitted to their relatives at home not only a love for the luxuries of the East, but a true appreciation for the arts and refinements of Greece. Scandinavia has nothing to compare with these ruined churches within the walls of Wisby ; scarcely are they surpassed by the cathedrals of Western Europe.

A curious fact is told us by Professor Säve, of Stockholm, who has dived deeply into Gotland's lore. He says, in proof of the extent of the Greek influence in Gotland, that one day he heard a common peasant girl tell a story word for word from Herodotus. Be that as it may, the island is full of Runic stones, put up to the memory of Gotland travellers and merchants who perished on the long and dangerous journey to Constantinople across the Steppes of Russia.

It is an undecided point amongst authorities on commercial law, whether or not the "laws of Wisby" were the genuine predecessors of those now generally in vogue. French writers¹ deny the assertion ; they claim a priority for the code of Oléron, and reject the code of Wisby as the spurious compilation of a modern printer ; yet it is not probable that the well-to-do traders who built and beautified Wisby would be entirely without a maritime code, and if they had one, they probably handed it down to posterity.

This will always be a point difficult to decide ; but one has but to read the code of Wisby and the code of Rhodes, to be struck by the similarity between them ; and then, judging by the intercourse with Greece, it is easy to conjecture that Gotland merchants brought home with them from the East a knowledge of this celebrated code, which governed the commercial dealings of the Mediterranean prior to the Crusades : and it is more than probable that through this northern channel, through Russia and through Gotland, did the practices of the old world filter into the commercial haunts of the new.

¹ Vide M. Pardessus' *Histoire des Lois Maritimes*.

Some other facts contained in the annals of Gotland's commerce are interesting. As late as 1229 Gregory IX. issued a bull to the Cistercian abbot of Wisby to the effect that the Gotlanders should be restrained from holding intercourse with the Muscovites, the foes of Christianity. By that time their relations in Europe had entirely merged themselves in the Slavonic race, which grew in intensity during the seven centuries that the Varangian dynasty reigned over Russia.

During the whole of the period from the emigration to Russia down to the fall of Gotland as a commercial centre, close intimacy was kept up between Russia and Scandinavia, and the wave of emigration proceeded in full vigour. An old annalist tells us¹ that in 1018 Kief was guarded by "the strength of the fugitive serfs who flocked thither, especially Danish;" and in 1269 Novgorod, Wisby, and Lübeck executed a treaty by which all old treaties for free commerce, toll-free trade, and protection for merchants were confirmed, and through the influence of Gotland merchants who traded between Germany and Russia, Novgorod became known throughout Europe as a centre of commerce, and eventually became the leading Eastern centre of the Hanseatic League. In Novgorod the Gotland merchants had their own church of St. Olaf, and in Wisby the Russians likewise had their own church, warehouses, and quays.

During this period of her existence Russia was intensely Scandinavian. The legislation of the Russian Charlemagne, as he is termed, the great Jaroslaf (1016-1054), is strangely Norman in its character. In his code, "*the Rousskaia Pravda*," is found the pursuit of an assassin by all the relatives of the dead; there is the "*wehrgeld*" for different crimes, the judicial duel, the ordeal by boiling water, even a jury of twelve citizens to decide on all points of law. And by the marriage of the relatives of Jaroslaf he was closely connected with many of the Courts of Europe. His sister married the King of Poland, one of his daughters married Harold the Brave, King of Norway, another Henry I. of France, and a third Andrew, King of Hungary; whilst Vladimir, his eldest son (cf. the Danish "Waldemar"), is said to have espoused Githa, daughter of Harold, King of England. Moreover, his Court was an asylum for exiled princes in Western Europe. The sons of Edmund Ironsides, St. Olaf, the exiled King of Norway, and a Prince of Sweden, all found a welcome in the Russian capital. In short, throughout the whole of the Varangian dynasty Russia was more

¹ Bayer.

thoroughly European than she was again till the days of Peter the Great, who opened out a new line of policy for her, reuniting her with the West.

To this day many Russian families—and they are the leading ones—will boast of their Scandinavian origin, just as our own old families boast of having come to England in the Conqueror's train. By the stepping-stone of Normandy the Northmen reached England; by the stepping-stone of Gotland they reached Russia: both waves starting from the fountain-head of Denmark.

J. THEODORE BENT.

WHO WROTE "GIL BLAS" ?

LE SAGE'S novel, "Gil Blas of Santillana," enjoys a world-wide reputation. It is a vivid picture of manners, an apotheosis of the indifferent worldling to whom neither virtue nor roguery is in itself commendable or hateful, but to whom the pursuit of happiness, and success in that pursuit, constitute the aim and end of existence. The book, it has been shrewdly said, is as moral as experience ; it is also as useful ; and hence the cause of its popularity. Besides, Le Sage possesses in the highest degree the art of describing, in a fresh, pure, and simple style, that which is not pure, and of touching the evils of his time lightly, but always on the weak spot. Gil Blas tells his own story, and relates his illusions, his struggles, his failures and successes, with unimpaired cheerfulness and good-humoured philosophy. He dilates and reflects on all he sees, and on the whole exercises his wit as well on his own history as on the actions of the society in which he lives. All that he narrates is simple and drawn from the life ; and yet there is hardly a minor feature of the picture which does not aim both at satirising and finding excuses for the foibles of mankind. Gil Blas spares nothing and nobody, and even his own shortcomings are exposed with sparkling drollery and vengeful frankness, though he gives himself credit—and to others as well—for the upwellings of a better nature. He is a true type of men kindly disposed and not evil-intentioned, but withal weak in the flesh and unable always to resist temptation, even whilst he knows that he will repent of it afterwards.

It has been said that Le Sage, in his one-act farce, "Le Temple de Mémoire," represented at the Fair St. Laurent in 1725, and afterwards at the theatre of the Palais Royal, ridiculed the exaggerated admiration for Voltaire—then only known by the tragedies of "Œdipe," "Artémire," and "Mariamne," and through his poem of "La Ligue," a feeble and first sketch of the "Henriade"—by making a poet who wishes to reach the Temple of Memory pick up a book from the ground whilst saying, "Je prends mon vol terre à terre."

Le Sage's farce, interspersed with songs, opens with the appearance of Folly and Pierrot. Folly bewails the misfortune that so many men are anxious to flirt with her, but that none seems to wish to marry her; whereupon her confidant advises her to adopt the name of Glory, and to promise a perennial name in history to him who will make her his wife, for "poets are not the only persons who love to be *mâche-lauriers* and *amateurs de fumée*." Fame approves of this advice; Folly thereupon shakes her bauble, and, as if by magic, the Temple of Memory arises on the top of a steep hill. Various suitors for her hand now come upon the stage. First, a conqueror, whose only delight is fighting, bullets, pistols, and knives, and who declares it as his opinion that "any one at the head of a goodly number of cavalry, infantry, and artillery has a right to another man's property." Then a rich miller makes her a proposal. Next an artist asks for her hand, who is dressed as a Harlequin, professes to be a good fellow, promises to be very uxorial, and shows Folly how to borrow different colours from his variegated coat. Folly, under the disguise of Glory, recommends him to marry a rich woman, and not to sue for her hand, for he will have a fair chance of dying on a dunghill unless he acts up to her recommendation. But the artist replies that he will be happy to live with her on such a malodorous spot, whereupon Folly, carried away by enthusiasm, exclaims, "Vivent les Gueux!" an exclamation which the great French song-writer, Béranger, utilised, about ninety years later, as the last line of the burden of his song, "Les Gueux." M. Tout-Uni, or Mr. Quite-Smooth, a poet, now appears, and is anxious to obtain the hand of Glory, but is rebuked for his presumption by M. Prône-Vers, Extoller of Verses—by whom it is said Voltaire's friend Thiériot was meant—who sues her in the name of that "Phoenix of poets," his "illustissime" friend, the "célébrissime" author of an "élégantissime" poem, "far superior to all poems past, present, and future, and whose praises he will never cease to sing." Folly replies that she knows by these hyperbolic epithets what kind of Homer is meant. Three other poets arrive as fresh suitors; but Folly now appears under her own true colours, argues that no real difference exists between herself and Glory, and expresses her willingness to marry them all. Voltaire, of whose poem, "La Ligue," Folly had already said—

Dans ce poème si vanté,
L'art se trouve un peu maltraité.
Vous arrangez votre matière
Sans (*sic*) dessus dessous,

Sans devant derrière ;
Et les bons morceaux y sont tous
Sans devant derrière,
Sans dessus dessous¹—

may, perhaps, have felt still more bitterly the sting of a couplet, also sung by Folly, and referring to his tragedy, "*Œdipus*," written when he was only eighteen years old, performed in 1718 forty-five times in succession, and published the following year with some letters to a friend, in which are analysed the "*Œdipus*" of Sophocles, a tragedy of the same name by Corneille, and his own. The lines sung by Folly in the fifteenth and last scene of the "*Temple de Mémoire*" are as follows :—

Un sujet traité par Corneille
N'avait qu'un prix très-incertain ;
Mais il devient une merveille,
En nous passant de main en main !
Ha ! vraiment voire !
Ziste, zeste et lonla,
En grand trio te voilà,
Dans le Temple de Mémoire.

Le Sage renewed his attack on the poet ten years later. In the last volume of "*Gil Blas*," which appeared in 1735, there is a portrait of Don Gabriel Triaquero, a fashionable playwright (bk. x. ch. 5), whom everybody runs to see, for no better reason than that he is fashionable, and which, it was generally believed, was intended for Voltaire. When, in 1752, five years after Le Sage's death, the "*Age of Louis XIV.*" was published, the then celebrated Voltaire saw his way to pay off a literary grudge, and could not resist the temptation. He says in this work : "' *Gil Blas* ' is still read because it is true to nature ; but it is entirely taken from the Spanish romance called ' *La Vidad de lo Escudiero Dom Marcos d'Obrego.* ' " ² This criticism of Voltaire was soon followed by others. The very trouble Le Sage had taken to render his novel perfect, the pains he had bestowed to become intimately acquainted with the habits and customs of the Spaniards of the times he describes, served as a reason for attacking him and his book, and for accusing him of impudent plagiarism. Father Juan d'Isla, a well-known

¹ These words are not to be found in the sixth volume of the *Théâtre de la Foire*, Amsterdam, Zacharie Châtelain, 1731, in which volume *Le Temple de Mémoire* is published.

² Ticknor, in his *History of Spanish Literature*, Vol. III., p. 2, ch. 34, observes : " The idea that the *Gil Blas* was taken entirely from the *Marcos de Obregon* of Espinel, or was very seriously indebted to that work, is as absurd as Voltaire's mode of spelling the title of the book, which evidently he had never seen, and of which he could even have heard very little. "

Spanish author, stigmatised Le Sage as having stolen "Gil Blas" from a manuscript which an unknown Andalusian advocate had given to the Frenchman whilst in Spain. The *padre* had his own Spanish translation of the French novel printed and published in Madrid in 1787, omitting some parts and altering others, adding to it a long and not successful continuation, and stating on the title-page that Gil Blas was "now restored to its country and native language by a Spaniard who does not choose to have his nation trifled with." But nobody believed in the Spanish advocate and in the manuscript given to Le Sage in Spain, for he had never been there. In 1818 Count François de Neufchâteau read a dissertation before the French Academy, in which he tried to show that Le Sage was the author of "Gil Blas," and this dissertation he enlarged, improved, and published in 1820, as a preface to an edition of this novel.¹ The same year, a learned Spanish exile, Don Juan Antonio Llorente, who was then living in Paris, and who had just published a "History of the Inquisition in Spain," presented to the French Academy a Memoir of Critical Observations, in which he attempted to establish that "Gil Blas" had not been written by Le Sage, but by a Spaniard. This Memoir was forwarded to a committee, composed of MM. de Neufchâteau, Raynouard, and Lemontey; but no report seems ever to have been made. Eighteen months after the presentation of Llorente's Memoir, the first of these gentlemen read to the Academy an "Examen du nouveau système sur l'auteur de 'Gil Blas,' ou réponse aux Observations critiques de M. Llorente," which was published the same year. This was shortly afterwards replied to by M. Llorente, who amplified and sent forth, in the form of a book, his "Observations critiques sur le Roman de 'Gil Blas de Santillane,'" in which he maintains that this novel was the work of the Spanish historian de Solis, chiefly because no one but this gentleman could have planned such a fiction at the time "Gil Blas" is supposed to have been written. Llorente's book is divided into fourteen chapters, of which the first and twelfth contain the pretended history of the manuscript, whilst the other ten attempt to prove its existence. The second chapter is called "A Chronology of the Life of Gil Blas," and gives the days and the months when

¹ This dissertation was really written by Victor Hugo, then a very young man. It is partly hinted at by the words Marius uses in the *Misérables*: "She would not fail to esteem and value me if she knew that I am the real author of a dissertation on Marcos Obregon de la Ronda, which M. François de Neufchâteau appropriated, and used as a preface to his edition of *Gil Blas*;" and is confirmed in a chapter of *Victor Hugo raconté par un témoin de sa vie* to be written by Madame Hugo.

certain events of the novel are supposed to have happened. According to this chapter, Gil Blas, born in 1588, was about thirty-two or thirty-three years old when Philip III. died, and was fifty-eight or fifty-nine when he married for the second time in 1646.

In the *North American Review* for October 1827 appeared an article "Who wrote 'Gil Blas'?" of which the author, Mr. A. H. Everett, inclines to the belief that de Solis, and not Le Sage, was the author of "Gil Blas." He bases his opinion chiefly on Llorente's "Observations," and states frankly that he has not seen the "Examen" of the Count de Neufchâteau, in defence of that novel, but has derived the latter's reasons from the work of Llorente. Mr. Everett's arguments in favour of a Spanish origin of "Gil Blas" are :—

1°. The minute acquaintance of the author with the political, geographical, and statistical situation of Spain, and with the manners of its inhabitants.

2°. The considerable number of errors, more or less obvious, principally in the manner of writing the names of places and persons, and most naturally accounted for by considering them as the errors of a person transcribing names with which he was not perfectly familiar.

3°. The mixture of Spanish idioms, and even Spanish words and phrases, to be found in "Gil Blas."

4°. The illustrating, by an example in French, "les intermèdes font beauté dans une comédie," the verbal niceties of the style of the Spanish poet, Gongora.

5°. The probability of Le Sage having taken "Gil Blas" from the same source as "The Bachelor of Salamanca," which came out in 1738 as an avowed translation from an unpublished Spanish manuscript.

These same arguments, amplified and worked out, as well as many fresh ones, have been used in an article also called "Who wrote 'Gil Blas'?" which appeared in the June number of *Blackwood's Magazine* for 1844, and in which are ably maintained the views of those who persist in believing that "Gil Blas" is of Spanish origin. Following chiefly Llorente, the writer of this article states that "Gil Blas" is translated from a manuscript written in Spanish by Don Antonio de Solis y Ribadeneira, author of "Historia de la Conquista de Mejico." The reasons given for this assertion are : 1°, that this novel abounds in facts and allusions which none but a Spaniard could know ; and, 2°, that it abounds in errors which no Spaniard could make.

It is further stated that Le Sage obtained the manuscript from the library of his friend and patron, the Abbé de Lyonne, third son of Hugo, Marquis de Lyonne, a lover of Spanish literature, who was sent on a secret mission to Spain in 1656 (1658), and who, whilst there, lived in great intimacy with Louis de Haro, Duke of Montoro. As an additional argument, it is mentioned that "The Bachelor of Salamanca," published in 1738, which the author himself admitted to be a translation from a Spanish manuscript, and of which he never produced the original, bears a great similarity to "Gil Blas," and contains part of that manuscript relating to America, and not found in the last-mentioned work of Le Sage. Nineteen points of resemblance are brought forward to prove this. It is also argued that the frequent allusions in "Gil Blas" to some of the most remarkable characters of the court of Louis XIV. only demonstrate "that the extremes of society are very uniform . . . and the abuses of government . . . the same, or nearly so, in every country."

The facts and allusions which none but a Spaniard could know are as follows :—

1. The custom of travelling on mules, the coin ducats, the begging with a rosary as well as the extorting money in the manner which Gil Blas delineates, and the subterranean caves described by Captain Rolando.

2. The words "dire son rosaire, rezar su rosario," as foreign to the habits of a "vieux militaire;" travelling the whole day without meeting any one; the escorting of a coach, and the drawing of that vehicle by mules.

3. The treatment of prisoners in Spain.

4. The exact description of the class of women known in Spain by the name "Beata."

5. The dinner-hour at twelve during the reigns of Philip III. and Philip IV.

6. The description of the Spanish innkeepers, so different from the French, as well as the intimate knowledge displayed by Gil Blas of the houses of noblemen at Madrid (bk. ii. ch. 7, and bk. vii. ch. 13).

7. The acquaintance with Spanish habits and customs, as Mergelina putting on her mantle to go to mass (bk. ii. ch. 7); Gil Blas joining the muleteer (bk. iii. ch. 1); Rolando informing Gil Blas that his comrades were three days in prison before being put to death (bk. iii. ch. 2); the allusion to the Andalusian way of managing a cloak (bk. iii. ch. 5); and to the "Caballeros en Plaza," or amateur gentlemen bull-fighters (bk. iv. ch. 7); the dress of the

inquisitor and his servants; the inkstand called "Tintero de Escribano," which the Spanish scribes always carry about with them, as well as the whole scene between Ambrosia de Lamela and Simon (bk. vi. ch. 1); the custom of carrying wine in leathern bags (bk. ii. ch. 6); the appointment of Ignatio to the archdeaconry of Granada, by virtue of a particular bull (bk. x. ch. 12); and the allusion which the Count-Duke of Olivarez makes to Don Alphonso de Leyva about the objection of the Aragonese to be governed by any other but the king himself, or by a person of the royal blood (bk. xi. ch. 12).

8. The use in "Gil Blas" of "Don" prefixed in Spanish to the Christian and never to the surname, as Don Juan, whilst its synonym "Dom" is in France prefixed to the surname, as Dom Calmet; "dame" as a translation of "señora," and the latter word itself; as well as the employment of many other Spanish expressions and idioms, such as "señor escudero, señor caballero, famosa comedia, hidalgo, contador mayor, oidor, escribano, hospital de niños, olla podrida, marmalada de berengaria, picaro, etc."

9. The knowledge that during the reign of Philip IV. the actors lodged in the provinces in the buildings in which dramatic performances were represented.

10. The idiomatic Spanish verses which Don Gaston de Cogollos sings in the Tower of Segovia (bk. ix. ch. 5).

11. The words which Le Sage has evidently translated from the Spanish, such as "seigneur, dame, cavalier," as well as many expressions of Spanish origin, such as "à Dieu ne plaise, ils sont tous plus durs que des Juifs, grâces au ciel, patriarche des Indes, garçon de famille, bénéfice simple, garçon de bien et d'honneur, fameux directeur, laboureur, disciple, viceroi, Juif comme Pilate, dormir la sieste, rendre de très-humbles grâces, etc."

12. The local knowledge of Spanish towns, as shown by Gil Blas, such as the mentioning of a church at Toledo called "de los Reyes," the speaking of the Prado of Madrid as the "pré de Saint-Jérôme," the quoting the "Rue des Infantes" and the "Maison des Repenties" in the same town; and the statement that Lucretia, the repentant mistress of Philip IV., is going into the nunnery of "la Incarnacion," reserved expressly for nuns connected in some way with the royal family of Spain. To this should be added the mentioning of no less than seventy provinces and large towns in Spain, and of one hundred and three Spanish villages and towns of inferior importance, many of them unknown out of that country.

13. The citing of the names of thirteen dukes and eight counts,

of which four only are fictitious, whilst the title of "Admirante de Castilia," also quoted, did not exist when "Gil Blas" was published; the naming of about sixty persons celebrated in their day among the inhabitants of the Peninsula, belonging to distinguished families, and the employment of twenty-nine names, really Spanish, but applied to imaginary characters, as well as forty-five names "intended to explain the character of those to whom they are given, like Mrs. Slipslop and Parson Trulliber in English, retained by Le Sage, notwithstanding the loss of their original signification."

The errors which no Spaniard would make are :—

1. The orthographical mistakes which abound in "Gil Blas," and which prove that Le Sage transcribed his novel from a manuscript, such as "Corcuelo" instead of "Corzuelo," "Manjuelo" for "Majuelo," "Londona" for "Londoño," "carochas" for "corozas," "cantador" for "contador," "Segiar" for "Seguiar," "Moyadas" for "Miajadas," "Priego" for "Pliego."

2. Le Sage's ignorance of Spanish etiquette by supposing as equivalent words "Señor" and "Señoria," the latter title being only given to people of high station and illustrious rank.

3. The anecdote about the rector of the University of Salamanca being found in the streets intoxicated; which does not tally with Spanish manners, but was interpolated by Le Sage.

4. The many errors in the spelling of Spanish places, which go far to prove that Le Sage did not copy these names from printed books.

5. The historical errors to be found in "Gil Blas," and of which only one, which occurs in the story of Don Pompeyo de Castro (bk. iii. ch. 7), is confessed by Le Sage, "though the original Spanish author may have fallen into some of them."

6. The errors of Le Sage himself, such as Donna Mencia's first husband dying in the service of the King of Portugal, five or six years after the beginning of the seventeenth century; "Le Mariage de Vengeance" (bk. iv. ch. 4), which did not take place, as described, in the time of Philip II., but three hundred years before, during the Sicilian Vespers, 1283; Gil Blas, after his release from the Tower of Segovia, telling his patron, Alphonso de Leyva, that four months before he had held an important office under the Spanish crown (bk. ix. ch. 10), while he states to Philip IV. that he was six months in prison at Segovia (bk. xi. ch. 2); and, above all, the error of Scipio (bk. xi. ch. 1) returning to his master in 1621, and informing him that Philip III. had died, that the Cardinal Duke of Lerma had lost his office, and that the Count of Olivarez was

appointed prime minister, whilst in reality the Duke of Lerma had been dismissed three years before the death of the king, and was succeeded by his son, the Duke of Uzeda. Hence it is inferred that Le Sage, in transcribing from the supposed Spanish manuscript, left out the words "the Duke of Uzeda, son of," for that nobleman was really turned out of office at the death of Philip III.

Moreover, the reasons given why Le Sage claims to be the author of "*Gil Blas*," but merely the translator of the "*Bachelor of Salamanca*," are, that the "*Bachelor*" "had been long in the possession of the Marquis de Lyonne and his son before it became the property of Le Sage ; and, although tolerably certain that it had never been diligently perused, the French author could not be sure that it had not attracted superficial notice, and that the name was not known to many people." Then, after expressing "the tenderness to the friend and companion of our boyhood, and gratitude to him who has enlivened many an hour, and added so much to our stock of intellectual happiness," the article in *Blackwood* ends by affirming that "the main fact contended for by M. Llorente—that is, the Spanish origin of '*Gil Blas*'—is undeniable; and the subordinate and collateral points of his system [are] invested with a high degree of probability."

A late German author and well-known Spanish scholar, Charles Frederic Franceson, published in 1857 a pamphlet, written in French, "*Essai sur la Question de l'Originalité de 'Gil Blas*," in which he defended Le Sage against the accusations of Llorente. In this essay he argues that "*The Bachelor of Salamanca*," being published after "*Gil Blas*," can only be called a weakened reflex of the earlier written novel ; that there are as many Spanish words and phrases in Le Sage's avowed translations, "*Le Diable Boiteux*," "*Guzman d'Alfarache*," and "*Estevanille Gonsalez*," as in "*Gil Blas* ;" and that Spanish words have not always an equivalent in French, so that "pré" is not the same as "prado," "maire" as "corregidor," &c. He further observes that even Voltaire, who did not know Spanish well, in the first two chapters of his tale, "*Jenni, ou l'Athée*," of which the action takes place at Barcelona, employs a certain number of allegorical names, indicating the character or profession of the personages to which they belong, such as Señora Boca Vermeja (ruddy-mouth), Señor Don Inigo y Mendrozo (coward), and some others. He also states that the accusation that Le Sage sometimes writes "Juan, Pedro," and similar Spanish names, and sometimes "Jean, Pierre" in French, is not quite correct. The novelist always employs Spanish names when they are written

differently from French ones, and often accompanies them by "Don ;" but when they are identical, or nearly so, in both languages, he writes the French form, as "Don Gaston, don Alphonse, don Louis, don Félix." "Dom" is not the equivalent of the Spanish "Don," but is applied in French to certain members of religious orders ; "dame" and "maître" are used by Molière in the "Avare," as "dame Claude," "maître Jacques ;" "seigneur" and "cavalier" are only written to give local colouring to "Gil Blas ;" the four lines which Don Gaston de Cogollos sings are possibly taken from a Spanish author, whilst the misspelling of proper names, towns, places, &c., is probably owing to printers' errors or to carelessness. M. Franceson gives also in his pamphlet the translation of all the passages which Le Sage has borrowed from Espinel's "Marcos de Obregon," and a list of Spanish authors laid under contribution by the French novelist, as well as the original passages of Firenzuola's Italian translation of Apuleius's "Golden Ass," from which Gil Blas's adventures in the cave of the robbers have been taken.

“The Chronology of the Life of Gil Blas,” as given by M. Llorente, is wrong, though it seems ridiculous to treat a novel like an historical work, and to verify every date on which certain actions of the hero are supposed to have taken place. Gil Blas left Oviedo when he was seventeen years old (bk. i. ch. 1), and about six months afterwards Donna Mencia de Mosquera relates to him that her husband died seven years ago, when the Portuguese army was at Fez (bk. i. ch. 11). As Don Sebastian, King of Portugal, went in 1578 with an army to Morocco, where he was killed the same year, Donna Mencia must have spoken in 1585; therefore Gil Blas was born in 1568, and not in 1588, as Llorente says. Then arises the difficulty of explaining how, some time after Donna Mencia’s adventure, and after Portugal had been annexed to Spain in 1580, the master of Gil Blas, Don Bernard de Castil-Blazo, could pass for a spy of the King of Portugal (bk. iii. ch. 1), and how Don Pompeyo de Castro could mention a King of Portugal when no such monarch existed—Le Sage, in the later editions of “Gil Blas,” altered this potentate into a King of Poland (bk. iii. ch. 7)—and how Captain Rolando could say to Gil Blas (bk. iii. ch. 2) that, when he entered the town of Leon, the people would not have been more eager to see him if he had been a Portuguese general taken prisoner in war. Moreover, Gil Blas was imprisoned in the tower of Segovia a few months before the dismissal of the Duke of Lerma, which took place in 1618. Our hero was then fifty years old, and married Antonia some time afterwards. When the Count-Duke of Olivares was exiled in 1643, Gil Blas

would be more than seventy ; yet, nothing daunted, he returns to his estate after the count's death in 1646, calls himself a man "who begins to grow old," marries again, twenty-eight years after his first marriage, a young lady between nineteen and twenty, and begets two children, "of whom he devoutly believes himself to be the father."

It must be obvious that any literary man, before beginning to write such a work as "*Gil Blas*" and to describe the events of such an adventurous career at a peculiar period of history and in a particular country, would consult the different travels and descriptions of the land in which his story takes place—would, so to speak, try to assimilate himself with the natives, and, by dint of reading and studying, become, as it were, bone of their bone and flesh of their flesh. In this article the attempt will be made to prove that Le Sage did so. Let it, however, be remembered that the first two volumes of "*Gil Blas*" were published in 1715, the third in 1721, and the last in 1735.

(a) Le Sage acquired the habits and customs of Spain (see Nos. 1-7, page 6) in some of the books which he perused. The travelling by mules and the filthy state of the beds is mentioned : "Le samedi quatrième d'octobre, ayant changé de mules, je partis de Pampélone, ayant acheté des draps à cause de la malpropreté des lits."¹ The same book speaks of the subterranean caves in Castile, where it is said "the Spaniards retired during the time of the Moors,"—though Le Sage places the cave of Rolando in the Asturias,—and of the bull-fights "at Erija, five leagues from Fuentes . . . where there were four noblemen (Caballeros en Plaza), who fought all dressed in black, and with feathers in their hats." The Countess d'Aulnoy² describes also at full length a bull-fight which took place at Madrid in 1679, where six noble knights were engaged, and she mentions another fight in her "*Mémoires*."³ In her "*Relation*"⁴ she employs the phrase "réciter le rosaire," and says that all the Spanish ladies have one "attaché à leur ceinture." The same book gives also many examples of the tricks of innkeepers in Spain. The leather bag of wine is spoken of by her :⁵ "The wine is put in prepared goat-skins, and it always smells of pitch or burning." Another book of travels⁶ says that "they (the Spaniards) have no other casks but goat-

¹ *Journal du Voyage d'Espagne*, etc. Paris, 1669.

² *Relation du Voyage en Espagne*. Paris, 1690. Lettre X.

³ *Mémoires de la Cour d'Espagne*. Paris, 1690.

⁴ Lettre VIII.

⁵ Lettre IX.

⁶ *Relation de Madrid*. Cologne, 1665.

skins, which they call Bollegos, and which are so pitched that when I drink I seem to swallow the awl (le Saint Crespin) of a shoemaker." The Countess, in speaking of the condemned to death, states :¹ "Les lois du royaume de Valence . . . accordent quelques jours aux criminels après qu'ils ont été jugés." Le Sage says that this law existed also in Leon. The particular bull allowing the Spanish kings to appoint archbishops is spoken of by Lenglet du Fresnoy,² who says : "Le Roi seul, en vertu d'Indults du Saint Siège, nomme aux évêchés en Espagne." What "indults" are is to be found in Richelet's Dictionary, 1719: "Il y a deux sortes d'indults, actifs et passifs. Les indults actifs donnent le pouvoir de nommer et présenter des bénéfices et de les conférer. Les papes accordent ces indults aux Princes, aux Cardinaux, aux Archevêques, Evêques et autres Prélats." M. Llorente also pretends that the use of chocolate was unknown in France at the time Le Sage wrote "Gil Blas;" but Brillat-Savarin, in his "Physiologie du Goût,"³ says : "During the beginning of the Regency (1715-1723), chocolate was in more general use than coffee ; because it was then taken as an agreeable nourishment, whilst coffee was only looked upon as a curious and extravagant drink."

(b) The words and passages in "Gil Blas," evidently translated from the Spanish (see No. 8, page 7), and which are said not to be French, were partly used, as M. Franceson has already stated, to give a local colouring to the original, and are, as such, found in some of the books of travels which have been mentioned. The Countess d'Aulnoy⁴ uses "Señor cordonnier, hidalgos, señor escudero, oidor, l'Hôpital de los Niños, la famosa comedia." Another traveller in Spain, a Dutch diplomatist, Aarsens van Sommelsdyck, who wrote in French,⁵ says also, "Entre eux ils se traitent de Señores Cavalleros."⁵ Le Sage appears not always to have lodged the actors in the "posadas de los representantes" (see No. 9, page 7), for Laura relates to Gil Blas that Phenicia lived "with the whole troop in a large *hôtel garni*" (bk. vii. ch. 7).

(c) The dinner-hour was twelve o'clock in Paris as well as in Madrid (see No. 5, page 6). Boileau, in his third Satire, written in 1665, the very year of Philip IV.'s death, says that, "coming from Mass, P. hastens to a dinner to which he was invited, just as the clock struck twelve."

¹ *Mémoires de la Cour d'Espagne.*

² *Méthode pour étudier la Géographie.* Vol. VI. 1716.

³ *Méditation* VI. Section 2, § 10.

⁴ *Relation du Voyage en Espagne.*

⁵ *Voyage d'Espagne* (fait en 1655), etc. Cologne, 1666.

(d) Llorente accuses Le Sage of not knowing his own language (see No. 11, page 7), or, in other words, of introducing Spanish expressions into French. This accusation is totally wrong. Nearly all of the words or phrases quoted as not French are to be found in Richelet's Dictionary, of which the third edition, which I have consulted, was published in 1719. There we see "cavalier" described as "gentilhomme qui porte l'épée;" "seigneur," sometimes used "en riant," as "Seigneurs Chevaliers Catalans;" "à Dieu ne plaise;" "grâces à Dieu," though not "au ciel;" but, says the French lexicographer, "cette expression est basse;" "rendre grâces, rendre des actions de grâces," though not "rendre de très-humbles grâces;" "femme de bien et d'honneur." Richelet has also "famille," "viceroi," "bénéfice simple;" he defines "laboureur" as "celui qui cultive la terre avec la charue" (*sic*), and gives as an example "un riche laboureur," which expression Le Sage likewise uses ("Gil Blas," bk. v. ch. 1), and which evidently cannot mean "a rich day-labourer," as Llorente thinks it does. "Disciple," spelled "diciple," is defined as "écolier;" "fameux," which, according to Llorente, no Frenchman would use in the sense of "célèbre," was, according to Richelet, precisely employed in that sense in Le Sage's time. Llorente says about the word "directeur:" "Only a Spaniard, or at least some one who has lived a long time in Spain, can know the difference between a monk who is only seen in the confessional, and a very reverend father, of the 'Cordon Alto,' of the 'Haut Cordon,' who is called spiritual director of consciences, and whom the devotees treat to pigeons, partridges, and other little dainty dishes." In Richelet's Dictionary "directeur" is defined as the "ordinary confessor of a person," and the two following lines are quoted from Boileau's tenth "Satire:" "But of all mortals, thanks to the pious souls, none is so well cared for as a *directeur de femmes*." The Countess d'Aulnoy says in her "Relation du Voyage en Espagne:"¹ "M. Mellini, the Apostolic Nuncio, consecrated the 'patriarche des Indes' on Trinity, and the king was present."

(e) The local knowledge of Spanish towns displayed by Le Sage (see No. 12, page 7) might easily have been acquired; for in d'Aulnoy's "Relation," in the thirteenth letter, the Countess says: "We went to hear mass in the Church de Los Reyes at Toledo."² The "Maison des Repenties," to which Sirena is sent ("Gil Blas," bk. ix. ch. 7), may have been anywhere; the Countess d'Aulnoy

¹ Lettre X.

² Llorente says the knowledge of the Church de los Reyes at Toledo "est une des preuves irrécusables de l'existence d'un manuscrit espagnol."

speaks of one in her "Relation ;" and so she does four times of the existence of a convent, "Las Descalzas Reales," called by Le Sage "Monastère de l'Incarnation," where the widows and mistresses of the Kings of Spain used to retire. In the third letter she says : "Philip IV. preferred Maria Calderona to a young lady of noble birth who was in attendance on the Queen, and who was so hurt by the fickleness of the King, whom she really loved, and by whom she had a son, that she withdrew to Las Descalzas Reales, where she became a nun. . . . The King sent word to La Calderona that she had to go in a nunnery, as it is the custom when the King quits his mistress." In the ninth letter the Countess writes : "This order of the Carmelites is held here in great veneration. Even Queens, when they become widows, are obliged to spend with them the rest of their lives. Don Juan (himself the illegitimate son of Philip IV.) has an illegitimate daughter who is a Carmelite nun. She is wonderfully beautiful, and it is said that she did not wish to take the veil ; but it was her destiny, and so it is the fate of many others of her rank, who are scarcely more satisfied about it than she was. These nuns are called Descalzas Reales, which means 'royal ladies.' This rule applies even to the King's mistresses, whether they are unmarried or widows. When he ceases to love them, they must become nuns." The Countess repeats this in her fifteenth and last letter, and also in her "Mémoires." The knowledge that there was such a convent, says the author of the article in *Blackwood*, is "a still stronger argument in favour of the existence of a Spanish manuscript." Calling the Prado of Madrid by its right name, and quoting the "Rue des Infantes," is not to be wondered at, for there were several guide-books of Madrid printed, before "Gil Blas" was published. The mentioning of so many provinces, large and small towns, and villages of Spain, is not marvellous, as there existed many geographical handbooks of Spain, written in Latin, as well as Colmenar's "Délices d'Espagne et de Portugal," 1707, translated into French, and all published long before "Gil Blas" saw the light. A large number of these names are also given in the books of travels in Spain, already mentioned. The titles of the dukes, counts, and celebrated persons to be found in "Gil Blas" may be discovered in d'Aulnoy's "Voyage," in her "Mémoires de la Cour d'Espagne," in Salazar's "Inventaire,"¹ and in many other works. I find, in the "Inventaire" alone, the names of the nobles, their residences and incomes, with a list of archbishops and bishops, viscounts, generals,

¹ Salazar, *Inventaire général des plus curieuses recherches des royaumes d'Espagne, traduit de l'Espagnol.* Paris, 1615.

admirals, priors, commanderies ; and also the councils and councillors, presidents, auditors, secretaries, and other officers, and the way they are appointed, as well as their different incomes. In this little book are likewise given lists of the officers of the king's household, their salaries and pensions ; and at the end of it a table showing the distances between the different towns and villages. In the Countess's "*Mémoires*" there is a list of the archbishops, bishops, and different *grandees* of Spain ; she also relates the history of the *Admirante* of Castile, a title abolished when Le Sage wrote, but not when the Countess penned her book. To say that forty-five Spanish names, such as those of Mrs. Slipslop and Parson Trulliber (see No. 13, page 8), were not likely to be invented by any but a Spaniard seems to me to be forgetting that Le Sage was an accomplished Spanish scholar ; but, even if he were "only acquainted with the lighter part of Spanish literature," he might easily have compounded these names. The orthographical mistakes (see No. 1, page 8) are, as Mr. Franceson has already observed, chiefly printers' errors or faults of carelessness ; though many of them, such as "*Contador*," "*Miyadas*," "*Majuelo*," and "*Pliego*," are rightly spelt in the early editions of "*Gil Blas*." The supposed error of Le Sage in imagining "*seigneur*," "*Señor*," and "*seigneurie*," "*Señoria*," to be equivalent, and on which so much stress has been laid by M. Llorente, as proving that the French author must have plagiarised from a Spanish manuscript, without understanding what he did (see No. 2, page 8), is no error at all.¹ Le Sage uses the word "*seigneurie*" in "*Gil Blas*" twelve times :—

1°. When speaking of the actresses who treat great lords familiarly, and who, far from addressing them as "*Excellences*, *ne leur donnaient pas même de la seigneurie*" (bk. iii. ch. 10).

2°. Don Rodrigo de Calderon calls Gil Blas "*Seigneur de Santillane* ;" "he," says Gil Blas, "who had never yet addressed me in any other way but as '*vous, sans jamais se servir du terme de seigneurie*'" (bk. viii. ch. 5).

3°. Don Roger de Rada, when relating his adventures, says to Gil Blas, "*de peur d'ennuyer votre seigneurie*" (bk. viii. ch. 8).

4°. Fabricio addresses Gil Blas as "*Seigneur de Santillane*," and then as "*Seigneur*, I am delighted with the prosperity of your *seigneurie* ;" upon which Gil Blas replies, "*Oh ! que diable ! trêve de seigneur et de seigneurie*" (bk. viii. ch. 9).

¹ Llorente says distinctly about the use of the word "*seigneurie* : " "*Le Sage n'entendait pas même ce qu'il copiait.*"

5°. As love-messenger of the Prince of Spain, Gil Blas is addressed by the Señora Mencia as “votre seigneurie” (bk. viii. ch. 10).

6°. Gil Blas says of himself. “Gabriel Salero thought that he had found in ‘ma seigneurie’ the best match in Spain for his daughter” (bk. ix. ch. 1).

7°. Gil Blas addresses Señor Manuel Ordoñez: “My friend Fabricio would have done much better to remain with your ‘seigneurie’ than to cultivate poetry” (bk. x. ch. 2).

8°. In stopping at the house of Don Alphonso de Leyva at Valencia, Gil Blas relates: “I found in my room a good bed, on which my ‘seigneurie,’ having laid down, fell asleep” (bk. x. ch. 5).

9°. Joseph Navarro says to Gil Blas: “My master has promised to speak for you to the Count of Olivarez ‘sur le bien que je lui ai dit de votre seigneurie’” (bk. xi. ch. 3).

10°. Scipio addresses Gil Blas: “You see that fortune has great designs on ‘votre seigneurie’” (bk. xi. ch. 6).

11°. The dancing-master, Martin Ligerio, says to Gil Blas: “I have been told that it is ‘votre seigneurie’ who selects the masters for my lord Don Henry” (bk. xii. ch. 5).

12°. Scipio declares to Gil Blas: “I like better a good office with ‘votre seigneurie’ than to be again exposed to the perils of the sea” (bk. xii. ch. 6).

In none of these cases can “seigneurie” mean “Señoria,” a title only given to Spanish grandees. In the first two examples Le Sage uses the word rightly, as it was then employed in French for “the title given by the estate.” In the last ten examples he seems to apply this expression *en riant*, or for the sake of civility.¹

(f) The anecdote about the rector of the University of Salamanca (see No. 3, page 8) is certainly not in accordance with Spanish manners, but only demonstrates that, however careful an author may be, the difficulties of letting the scenes of a novel take place on foreign ground must some time or other induce him to commit an error.

¹ Richelet, in his Dictionary, defines “seigneurie” as “une terre seigneuriale,” and quotes from Molière’s *L’Ecole des Femmes* (Act I. sc. 1) Chrysalde’s lines to Arnolphe, who had adopted the name of Monsieur de la Souche:—

Que diable vous a fait aussi vous aviser
À quarante et deux ans de vous débaptiser,
Et d’un vieux tronc pourri de votre métairie
Vous faire dans le monde un nom de seigneurie?

Richelet says also, “‘seigneurie’ is used *en riant*, and has the same meaning as ‘signoria’ among the Italians, when they speak to a person civilly;” and then he quotes from Molière’s *Cocu Imaginaire*: “Très-humble serviteur à votre seigneurie.”

(g) The accusation of the many topographical errors to be found in "Gil Blas" (see No. 4, page 8), of which the enumeration is borrowed from Llorente, and which errors are partly reproduced by *Blackwood*, has been accepted by all Le Sage's defenders as true. But, if they had consulted two maps of Spain—a large one, "Carte nouvelle du royaume d'Espagne, dédiée à Sa Majesté Catholique Philippe V.," Paris, 1705; and a smaller one, "L'Espagne divisée en tous ses royaumes, principautés, etc., à l'usage de Monseigneur le duc de Bourgogne," Amsterdam, 1710—they would have found that Le Sage was nearly always right. Notwithstanding all that has been said to the contrary, Betancos, Rodillas, Grajal (bk. i. ch. 11), Moyados, Valpuesta (bk. ii. ch. 9), Luceno¹ (bk. iii. ch. 2), Villardesa and Almodabar (bk. iv. ch. 11)—spelled on the large map Villardssaz and Almodovar, on the small map Villardesaz and Almodavar—Castil Blazo² (bk. v. ch. 1), Llirias (bk. ix. ch. 10), Melilla, Toralva (bk. v. ch. 1), Ponte de Duero (bk. ii. ch. 8), are all in their right places and well spelt, whilst Almerin (bk. v. ch. 1), which ought to have been Almoharin according to M. Llorente, is printed so on the small map, but figures on the large one as "Lmorin," with the usual sign of a town before it, which makes it look like "Almorin." All these names were not altered in later editions, but are to be found in the edition of "Gil Blas" published in three volumes, Paris, 1721, and also in the first one in four volumes, Paris, 1735, except that "Carrillo"—another of Le Sage's supposed mis-spellings discovered by M. Llorente—was correctly printed in the edition of 1721, but with only one *r* in the one published fourteen years later. Le Sage's Orbisa (bk. x. ch. 10) ought to be Cobisa. Peñafiel is mentioned as lying on the road from Segovia to Valladolid (bk. x. ch. 1); "this ought to be Portillo," says Llorente, because Valladolid is twelve leagues from Peñafiel, and therefore it is impossible to arrive there in one day." Portillo is certainly on the road between Valladolid and Segovia, but it seems not impossible to go twelve leagues when one has, like Gil Blas, "une chaise tirée par deux bonnes mules." But M. Llorente is difficult to please. When Gil Blas leaves Oviedo, after his father's death, and continues his journey (bk. x. ch. 8) "à petites journées," our Spanish critic observes that a carriage drawn by two mules ought

¹ Llorente says in his *Observations*: "Il n'y a eu en Espagne aucun village du nom de Luceno."

² Llorente writes: "Le traducteur Isla s'est permis d'omettre les mots (Castil-Blazo), parce qu'il savait bien qu'il n'y avait point de pays de ce nom en Espagne." M. Llorente does not mean by "pays" "country," but "village."

not to go at so slow a pace. The blunder of placing Alcala de Henarez on the road from Madrid to Segovia seems to be Le Sage's own. The author of the article in *Blackwood* asks : " If Le Sage had invented the story, and clothed it with names of Spanish cities and villages, taken from *printed* books, can any one suppose that he would have fallen into all these errors?" It has been proved that they are not errors of Le Sage, but of M. Llorente ; though, in justice to this gentleman, it ought to be stated that several of the towns mentioned by the French author are not found on modern maps.

(h) In a novel, even a so-called historical one, errors are generally found; how much more are these, then, to be expected in a tale like "Gil Blas"? Le Sage attempted to correct one of these errors which occurs in the history related by Don Pompeyo de Castro, by transferring the scene from Portugal to Poland ; "but how comes it to pass," asks the author of the article in *Blackwood*, "that Le Sage, who singles out with such painful anxiety the error to which we have adverted, suffers others of equal importance to pass altogether unnoticed?" (See No. 5, page 8.) This assertion is not quite correct, for the following notice prefaced the edition of "Gil Blas" of 1735 :—

"In the third volume an epoch is mentioned (the time of the flight of Laura with Zendono to Portugal) which does not agree with the history of Don Pompeyo de Castro, to be found in the first volume (bk. iii. ch. 7). It appears that Philip the Second had not yet conquered Portugal,¹ and we see here suddenly this kingdom under the sway of Philip the Third,² without Gil Blas being much the older for it. This is a chronological fault which the author has perceived too late, but which he promises to correct later, as well as many others, if ever a new edition of his works should appear."

He corrected this fault there and then, and left the others to be altered afterwards. But in 1735 Le Sage was sixty-seven years old ; and increasing infirmities and other literary labour probably prevented him from accomplishing what he intended. To argue from this—as is done in *Blackwood's Magazine*—that Le Sage left "to posterity a lasting and unequivocal proof of his plagiarism . . . by dwelling on one anachronism as an error which he intended to correct, in a work swarming in every part with others equally flagrant, of which he takes no notice," is, to say the least of it, a general accu-

¹ The Duke of Alba conquered Portugal in 1580. (Original note of Le Sage.)

² Philip III. began to reign in 1598, and died in 1621. (Original note of Le Sage.)

sation which requires other proofs than the remark that these mistakes were those "into which the original author had fallen, and which, as his object was not to give an exact relation of facts, he probably disregarded altogether." However, what is excusable in a Spaniard must equally be so in a Frenchman.

(i) In extenuation of the errors of Le Sage himself (see No. 6, page 8) may be brought forward the remark about these being mistakes "which the original author . . . probably disregarded altogether." Moreover, there is a lapse of fourteen years between the publication of the third and fourth volumes of "*Gil Blas*," and therefore Le Sage may well have forgotten that the hero of his novel, after having left the tower of Segovia, says to Don Alphonso de Leyva, in the third volume, that "four months ago he occupied an important post at Court" (bk. ix. ch. 10); and may have allowed *Gil Blas* to tell the king, in the first book of the fourth volume, that "he had been six months in prison" (bk. xi. ch. 2). That Le Sage was very negligent in writing his fourth volume is also proved by the supposed age of the hero of his novel, as compared with his birth and adventures, described in the first three volumes. The error of mentioning the dismissal of the Duke of Lerma, when Philip III. died, instead of saying, "the Duke of Uzeda, son of the Duke of Lerma," can only be accounted for by carelessness, for Le Sage speaks rightly of the exile of the Duke of Uzeda in another part of "*Gil Blas*" (bk. xi. ch. 5). It seems to have been a fancy of our author to call Valcancel Valcazar; for the whole history of Don Henry de Guzman was published in many books well known at the time Le Sage wrote.

(j) M. Franceson has already stated that "*The Bachelor of Salamanca*," published after "*Gil Blas*," is a weakened reproduction of this last novel. Mr. Ticknor, one of the best Spanish scholars of modern times, says, in his "*History of Spanish Literature*," that two chapters of "*The Bachelor*" are taken from Moreto's play, "*Desdén con el Desdén*," whilst Sainte-Beuve maintains that several chapters are borrowed from Ths. Gage, the English-American, "*His Travail by Sea and by Land; or, a New Survey of the West Indies, containing a Journall of three thousand and three hundred miles within the main land of America, etc.*" London, 1648, which was translated into French by Le Sieur de Beaulieu, H. O'Neil (*i.e.* A. Baillet), Paris, 1677. It becomes therefore difficult to see how "*The Bachelor*" can have formed part of an *original* Spanish manuscript long in the possession of the Marquis de Lyonne and his son; for a great deal of the French work appears to have been borrowed from printed books,

one of them not even translated into Spanish.¹ As for "Gil Blas," Llorente and *Blackwood* both mention that two-thirds of this novel are taken from well-known Spanish works. If, therefore, Le Sage copied "Gil Blas" from a manuscript of de Solis, that manuscript was chiefly composed of plagiarisms, and the Spanish author must have been more stupid than men ordinarily are to steal from books so well known in Spain and to his contemporaries. Moreover, if the "literary larcenies" committed in "Gil Blas" amount to so heavy a bulk, how can Le Sage have pilfered his world-famed novel from a manuscript? There is not the shadow of an evidence that he has done so. The readers of this article will have seen how Le Sage became possessed of his intimate knowledge of Spain, and may also have perceived that his French was not quite so bad as M. Llorente wishes to prove it, nor that his errors were as manifold, and, in fact, as clearly faults of a copyist, as his literary enemies desire to make it out.

The life of an author is not that of a Sybarite. It is passed in laborious and sedentary occupations, which are generally rewarded by a not over-abundant pay, and cause many mental anxieties. Envy, hatred, and malice not seldom attack him whilst he is alive, and are not even silenced after his death. The career of Le Sage is no exception to this almost general rule. He was no flatterer of the great; he did not attach himself to any then existing party or influential nobleman; and he dared to have opinions of his own. He was not to be bribed, worked hard for his daily bread, and gained a mere pittance; and he was finally obliged, by increasing age and infirmities, to take shelter with his only living son, a clergyman at Boulogne-sur-Mer, where he died. His fame, of course, increased when he was no longer alive to give umbrage; but this did not prevent a few of his contemporaries from attacking his works, and, above all, his masterpiece, "Gil Blas." Voltaire and others began the fray, the Spaniards took it up through national vanity, and they succeeded in making some critics believe what they brought forward, and in making not a few literary men incline to the opinion that "Gil Blas" was merely a copy of a Spanish manuscript. If that delusion has been dispelled by the present article, the labour bestowed upon it has not been in vain.

HENRI VAN LAUN.

¹ In justice to M. Llorente it ought to be stated that he says in his *Observations*, ch. i.: "On pourrait bien soutenir que Le Sage est l'auteur original d'une grande partie du *Bachelier*, beaucoup plus qu'il ne le fut du *Gil Blas*."

ENGLISH ETHNOLOGY AND ENGLISH GENIUS.

IT has been admitted by some of the most eminent philologists that language is a very uncertain guide in questions relating to race. It will probably be allowed before long that history, when dealing with the same questions, is as little to be relied on as language. As yet, however, historians have lost nothing of their self-confidence. For many years past Mr. Freeman has kept assuring us that the English are a purely Teutonic people, and his statements have been abundantly repeated by younger writers, such as Canon Stubbs and Mr. Green. This reiterated assertion has been made in complete disregard of the evidence accumulated by scientific men tending to disprove what we may call the Teutonic theory. Yet it is clear that history, so far from being able thus contemptuously to slight anthropology, will be forced to give way in the conflict which has now virtually arisen. Theories suggested by the statements of ancient monkish chronicles have a far lower degree of certainty than the conclusions founded on observation of the physical peculiarities of existing races—their stature, the shape of their skulls, or the colour of their hair, their eyes, and their skin. By the study of such facts Professor Huxley was able to show, more than nine years ago, that the population of Western Europe may be divided broadly into a dark race and a fair race, which he calls respectively the melano-chroic and the xanthochroic types. It had long been assumed that the Kelts were dark and the Teutons fair. But Professor Huxley pointed out that all ancient authors were agreed that Kelt and Teuton were both fair alike. To what race, then, does the dark type belong? In the attempt to find an answer to the question thus reopened, the attention of anthropologists was naturally directed to the Basques, a dark people on the slopes of the Pyrenees, who still so distinctly retain their unmixed nationality; and the Silures of South Wales being found to resemble them closely in type, it has been generally assumed that the dark race of Britain belongs to this stock. Mr. Grant Allen, who in the *Fortnightly Review* for October 1880 has

made the latest assault on the Teutonic theory, to some extent adopts this view. But, according to the evidence brought forward by French ethnologists, the dark race seems to contain a second element—the Ligurian—perfectly distinct from the Basque. Though, like the Basques, the Ligurians are small and dark, they have nevertheless some marked points of difference. The Basque head and face are long and narrow, the nose is high, and both chin and forehead are not unfrequently retreating. The Ligurian head and face, on the contrary, are short and round, the nose is small and fleshy, the chin is full, and the forehead round and inclined to bulge. M. de Boisjoslin, in his work “*Les Peuples de la France*,” estimates that ten millions of the French people belong to this race. It also forms a strong element in the population of Northern Italy and of parts of Switzerland. Its identification has been delayed by the total loss of its original speech. On the Continent the name is still preserved in the Ligurian Alps and in the river Loire, formerly Ligur. From Britain it has now wholly vanished; but among the British tribes at the time of the Saxon invasion were found the Logrians; and a similar name, Liogairne, occurs in Ireland. That the Logrians were identical with the Ligurians of the Continent seems probable from the fact that the Ligurian type is distinctly recognisable in these islands at the present day. Mr. Grant Allen has unconsciously recognised it in the description, which he quotes from Professor Phillips, of the dark type to be found in Yorkshire and some of the Eastern counties. As to the distribution of the race in Britain, we can only say that it was probably most numerous in the East, the Basques or Silures prevailing in the West; while mixed with both were everywhere spread the Kelts. Even now we have not exhausted the complications of our ethnology. But we can do no more at present than allude to the probability that beneath Kelt and Ligurian and Basque we shall have ultimately to recognise the presence of a fourth element of Mongolian or Eskimo type, possibly descended from the Cave-men who inhabited Britain during the last glacial epoch.

Leaving these hypothetical strata, however, out of consideration, we see that the Britons were composed of at least three races—two of them dark, the Silurians and the Ligurians; and one fair, the Kelts. Mr. Freeman tells us that these people were exterminated by Teutons in the fifth and sixth centuries throughout the greater part of England. But Professor Huxley is still able to divide our population into two principal types, the dark and the fair. Now, if the Teutons, who were undeniably fair, completely destroyed the

earlier races, how comes it that there is a dark type in England at all? The dark types by their presence amongst us tell the story of their own survival, and testify to a fact which it might otherwise have been hard to prove. The true Kelt, being himself fair, can with difficulty be distinguished from the Teuton in our existing population; but the dark Briton having survived, we cannot suppose that the fair Briton perished; so that while the whole of our dark stock is non-Teutonic, so also is perhaps one-half of our fair stock, and only the remaining half of the latter is really of Teutonic descent.

If such be the case, we are driven to ask whether Mr. Freeman can possibly have misinterpreted the documentary evidence. Several writers have laboured with considerable success to show that this is the case. Dr. Nicholas, in his elaborate work "*The Pedigree of the English People*," proved that the History of Gildas, on which so much reliance is placed by upholders of the Teutonic theory, is entirely untrustworthy. Mr. Skene, in his "*Keltic Scotland*," has produced further evidence tending to establish Professor Huxley's views. Mr. Grant Allen—using the word Keltic, as we shall find it convenient henceforward to use it, to designate the composite pre-Saxon race—has shown that the South-Western Keltic area extends along the southern coast far enough to the east to include Hampshire. He has adduced evidence for believing that many other Western and West-Midland counties are either Keltic or half-Keltic in blood; while the important North-Western counties are also peopled chiefly by the same stock. He urges further the neglected fact that the Keltic element has, in addition to its original strength throughout the West, received continual reinforcements from Wales; and that into the great manufacturing towns of the North, as well as into London, there is a constant influx of Kelts from Wales, Ireland, and the Highlands of Scotland. According to his estimates, the population of London is recruited to the extent of 30 per cent. from English counties that are almost wholly Keltic, such as Devon and Somerset.

In addition to these arguments we would urge the following considerations. It is clear that the Teutonic conquest of these islands was much less complete than the previous Keltic conquest. In the earliest times of which we know anything the Keltic speech had penetrated into every corner of Britain and Ireland, and had completely driven out the earlier tongues. The races, however, who spoke those tongues had not been destroyed. Now, English, in spite of all its advantages as the language of a great civilised empire, has but recently replaced Keltic in Cornwall, has as yet failed to establish itself in many parts of Scotland and of Ireland, and has hardly gained

ground at all in Wales. In connection with these facts let us note at what a late period Wales was finally conquered, the Saxons even under Egbert having been unable to accomplish the task. But if all England up to the Welsh mountains had been occupied by a homogeneous Teutonic population, can we believe that Wales would not have been at once overwhelmed, and that the Keltic name and language would not have been completely obliterated? The Saxons were evidently not strong enough really to colonise the western half of England; they were able only to conquer it and occupy detached positions sufficient for that purpose. With regard to the West generally, we may sum up by saying, in Professor Huxley's words, that it is probably more Keltic as a whole than Ireland itself.

Assuming this result to be established, it becomes an interesting question whether there can be traced any indications of difference, either in the character or in the amount of the genius manifested by the Keltic and the Teutonic sections of the island. Mr. Allen has already done something for the Western section by the list he has given of the great men produced by Devonshire. We propose now to offer a more extended list of our most eminent men, showing to what parts of the kingdom they belong. Before beginning, it will be well to note that natives of London, the population of which is collected from all parts of the country, must be classed as "uncertain," except when we happen actually to know from what part of the country their parents came, in which case we shall of course treat them as belonging to those parts of the country to which their origin attaches them.

Let us begin with our ecclesiastics. Here, out of a list of thirty eminent men, four are Londoners; twenty, including Jeremy Taylor (a native of Cambridge) and Wesley (a Lincolnshire man), are Eastern; while six only are Western. These latter, however, include Hooker, of Devonshire birth, and Whitfield, a native of Gloucestershire. But the fact of Eastern superiority is here too plain to be disputed. Perhaps we may see in it some evidence of the piety and seriousness of the Teutonic race.

Next let us turn to the politicians. Here it is, of course, possible only to quote a very few names. Many of our eminent statesmen were of noble families, so that it is impossible to assign them with certainty to any one part of the country. Among such as we can speak of with certainty, Cardinal Wolsey was a native of Suffolk, Strafford of Yorkshire, and Walpole of Norfolk. A greater than any of these, Cromwell, will by many be set down at once to the credit of the East, as a native of the Fen country. But this is not at all certain.

It may be seen from Mr. Carlyle's account of his family that doubts arise whether he was not half Welsh ; and it was apparently a matter of accident that the family did not bear the Welsh name of Williams. Of undoubtedly Western origin are Chatham, a Cornishman, and Fox, who belonged to Dorset ; while, coming down to the present century, we find that Canning was Irish, that Peel was a Lancashire man (as is also Mr. Bright), and that Mr. Gladstone, born in Liverpool of Scotch parents, is of an order of genius very different from that which we are accustomed to regard as Teutonic.

Many of the men distinguished in Indian history might be classed both as soldiers and statesmen. Of these, one of the most illustrious, Clive, was a native of Shropshire. Along with him may be mentioned Warren Hastings, a statesman pure and simple, a native of Worcestershire. But our Indian heroes are so numerous that we cannot give an extended list. Mr. Allen says that half of them were Highland Scotch. If we apply to Mr. Froude, we shall learn that the other half were Irish.

Of our naval and military commanders generally, Nelson, born in Norfolk, bears a plainly Scandinavian name, while Wolfe was a native of Kent. But on the Western side Devonshire claims not only the greater part of the sea-captains and explorers of Elizabeth's reign—Drake, Hawkins, Sir Richard Grenville, and Sir Walter Raleigh—but also the greatest genius for war that England has produced, Churchill, Duke of Marlborough, born near Axminster. Blake, as great a seaman as Nelson, belongs to Somerset. As to the Duke of Wellington, we need hardly mention that he was Irish.

In science, the greatest name perhaps of all, that of Newton, is the property of the Scandinavian shire of Lincoln, though it must be observed that Newton believed himself to be of Scotch descent. Harvey was a native of Kent. Among men now living, Professor Huxley belongs by birth to Middlesex, and Sir J. Hooker to Norfolk. Faraday, too, was born in London ; his father came from Yorkshire, but whether from the eastern or western side of the county we cannot say. The undoubtedly Western names include Roger Bacon the monk, a native of Somerset ; Thomas Young, discoverer of the undulatory theory of light, born in the same county ; Sir Humphry Davy in Cornwall, Dr. Jenner in Gloucestershire, Dalton in Cumberland, and Clifford in Devonshire ; while of men still living in our midst, Mr. Justice Grove belongs to Glamorgan, Dr. Carpenter to Somerset, Mr. Adams, the astronomer, to Cornwall, Messrs. Jevons and Joule to Lancashire, Mr. A. R. Wallace to Monmouthshire, and Mr. Darwin to Shropshire, his name—Keltic, as Mr. Allen tells

us—fairly balancing the fact that his grandfather came from Nottingham. Lest we should appear to overlook them, we must add that Ireland claims Sir William Rowan Hamilton, the great mathematician, and Dr. Tyndall, the well-known physicist.

In philosophy we had better first mention the non-English names. Berkeley was Irish, while Hume and Adam Smith were Scotch, as was also Mr. Mill by immediate descent. Mr. Bain, of course, is also Scotch. Of the properly English names, Bacon, of Suffolk family on his father's side, was at least partly Western in blood, as his mother was one of the Cecils, who trace their origin to Herefordshire. Hartley was a native of Yorkshire, Malthus of Surrey, and Bentham of London (and so uncertain). Mr. Herbert Spencer comes from Derbyshire. To the West belong Hobbes, a native of Wiltshire; Locke and Cudworth, natives of Somerset; also the late Mr. Bagehot, a native of the same county. Amongst living writers, Mr. Galton belongs by birth to Warwickshire, and Mr. John Morley and Mr. Greg are both Lancashire men.

Some of the names just mentioned might perhaps have been better included in the general class of men of letters; among whom, at all events, we may rank Lamb, of Lincolnshire descent, and Hazlitt, a native of Kent. On the other hand, Sir Thomas Browne, Addison, Dr. Johnson, and De Quincey are all Western. Of the historians, Gibbon and Grote are both Kentish, but the latter was on his father's side of Flemish, on his mother's of Huguenot, extraction. Macaulay, of Highland Scotch descent on his father's side, had a Somersetshire mother. Mr. Froude is a native of Devon; Mr. Freeman himself of the somewhat Western shire of Worcester.

Of our artists the greatest, perhaps—Turner—was, unfortunately, a Londoner; as were also Cruikshank and Blake. To Suffolk belong both Gainsborough and Constable; to Yorkshire, Flaxman and Etty. Devonshire, on the other hand, claims Sir J. Reynolds; and Hogarth was of Westmoreland extraction. Sir Christopher Wren was a native of Wiltshire. An enumeration of our living painters would occupy too much space, and would for many reasons be unsatisfactory. In the list given, East and West are perhaps equally well represented.

We now come to the novelists. Defoe was born in London, and does not count. Richardson was a native of Derbyshire; Sterne, born in Ireland, was of Suffolk family; and the late Lord Lytton belongs to Norfolk. But the array of Western names is much more imposing. It includes Fielding, a native of Somerset; Miss Burney, born in Norfolk, but of Shropshire family; together with Miss

Austen, Dickens, and Mr. George Meredith, all natives of Hampshire—a Keltic county, as Mr. Allen has shown. Thackeray bore an unmistakably Keltic name. Keltic also, or at least Welsh, is Evans, the maiden name of George Eliot, who by birth belonged to Warwickshire. Mrs. Gaskell was a native of Lancashire. Mr. Hardy comes from Dorset; Mr. Blackmore from Devon. The Brontës, though natives of Yorkshire, were Irish on their father's side, and Cornish on their mother's, thus showing a doubly Keltic origin.

Finally we come to the poets, whom it will be well to treat a little more minutely than our other men of genius. If we examine the contributions to English poetry made by that large portion of the country comprised in the counties of Norfolk, Suffolk, Essex, Middlesex (outside London), Herts, Bucks, Bedford, Cambridge, Northampton, Huntingdon, Rutland, and Leicester, we shall be struck in the first place by the meagreness of the results of our search, and by the peculiar quality of the poetry which we find. The greatest poetic name that meets us is that of Dryden, who was of remote Westmoreland descent. The other names are Beaumont, Waller, Cowper, Crabbe, and Churchill. Is it necessary to make any comment? We see at once what pure Teutonic poetry is like. North and south, however, of this East-Anglian province, Eastern England makes a better show. Kent and Sussex boast respectively Marlowe and Shelley. Lincolnshire has given us Tennyson, and Northumberland Swinburne. So much for the East. The following great names cannot be reckoned on either side:—Chaucer, whose birthplace is unknown, and Spenser, Pope, Gray, and Keats, who were all born in London. Now let us look at our Western list. It comprises, first, Shakespeare, for Stratford-on-Avon, situated in the south-western corner of Warwickshire, is very much nearer to the Welsh border than to the German Sea; secondly, Milton of Oxfordshire and therefore somewhat more Eastern race on his father's side, but whose mother Johnson states to have been of Welsh family. Then, proceeding chronologically, we have a number of minor but illustrious names:—Herrick, a native of Devonshire; Congreve, of Staffordshire family; Samuel Butler (author of "Hudibras"), a native of Worcestershire; Prior, of Dorsetshire; and Chatterton, of Somerset. Finally we reach the modern poets, among whom we find Byron, Keltic by his mother, who was Highland Scotch, and by his grandmother who was Cornish; Coleridge, a native of Devonshire; Southey of Somerset; Wordsworth of Cumberland; Landor of Warwickshire; E. B. Browning of Herefordshire; and Robert Browning of Dorsetshire origin. And if we make an excursion northwards into Scotland, it is

chiefly near the Western coast that we shall find the poets—Burns in Ayrshire, Campbell in Glasgow, and Carlyle—if one may include him as a poet—in Dumfriesshire.

Possibly, however, it will be urged that many of these poets cannot be Keltic ; that their genius is too plainly Teutonic in character to allow of its being a matter of any consequence in what part of the island they happened to be born. Perhaps so. The easterly wind which, according to the German Professor, carried the soul of Shakespeare beyond Germany, blew so hard, no doubt, that it did not suffer him to alight even in any truly Teutonic English shire. The explanation, too, has the merit of being applicable to all the remaining cases, which would otherwise be so perplexing ; and thus we can see that a Crabbe, not having any very ample extent of pinion, is glad to drop down on the first land that comes in sight, while a Coleridge is borne onwards almost to the Western sea ; and that one or two others, more soaring than Crabbe, were born in the East is doubtless due to the fact that they were caught in a sudden south-western blast ; and, as on Dartmoor,

The north wind brings us rain,
The south wind blows it back again ;

so were they, when about to descend in the West, blown back into Kent or Lincolnshire.

Plausible, however, as this theory is, there are some who have ventured to reject it. Mr. Matthew Arnold, in his work on the Study of Keltic Literature, endeavoured, with a good deal of success, to show that the Keltic element in the English genius was far more considerable than was generally suspected. This he did principally by comparing Welsh and Irish literature with English and German poetry, and by showing that English and Keltic literature have many characteristics in common which are foreign to the German. Now, from which of our poets did Mr. Arnold take his examples of what he pronounces to be outcomes of the Keltic spirit in our tongue ? From Shakespeare and Milton, from Wordsworth and Keats, from Byron and Campbell. But Mr. Arnold had no theory as to one part of the country being more Keltic than another ; and therefore the coincidence is somewhat remarkable that all these poets except Keats, a Londoner, should either be Western, or wholly or partly Highland Scotch. And if it be objected that Mr. Arnold takes examples from Southey of what he calls the Teutonic spirit, we may say that the weight of this solitary exception can hardly be great. It would, further, be easy to carry the war into the enemy's country.

Several of the most illustrious Eastern poets are of aristocratic families, far more likely to have crossed their blood with that of localities distant from their own than the humbler stocks from which, in the majority of cases, the Western poets have sprung.

Let us now consider briefly the general results of our enumeration. One thing is clear. The notion of Teutonic superiority is emphatically negatived. If, as we once heard said, the intellect of England were Teutonic, not Keltic, there ought to be some unmistakable sign of this in the superior manifestations of genius made by the East, and in a corresponding inferiority in the West. We ought to find our Bœotia in Devonshire, our Attica in Norfolk or Essex. But it is a result the reverse of this that we have reached. Our Attica, if it is to be found anywhere, must be sought for in the West. Perhaps, also, it may not be without significance to those who can look at the matter without prejudice, that the two most brilliant Eastern counties, Kent and Lincoln,¹ still retain their Keltic names. However this may be, we think it is impossible to deny that in poetry and imaginative literature the superiority of the West is decided, or that the West in general can boast more various kinds of genius than the East, while inferior in none that are common to both. And if it should be urged that at least the political capacity of Britain is wholly Teutonic, we would draw attention to the fact that as it was an Irish tribe that gave a name to Scotland and made of it a kingdom, so in the south it was the more than half-Keltic Wessex, not East Anglia or Northumbria, that rose to supremacy among the states of the Heptarchy.

This general result is one which all thoughtful men should surely welcome. The habit which has so long prevailed of setting down everything great and glorious in England to the credit of the Teuton has not been productive of any good that we are aware of. The supposed superiority of the Teuton has, on the contrary, been continually made a ground for despising the Welsh and the Irish, and it must be considered to have done much to foster ill-will among the nationalities of the kingdom. It has been continually appealed to in politics as an excuse for perpetuating misgovernment; and even a writer like Mr. Cliffe Leslie resorts to it for an explanation in part of

¹ Lincoln is of course only half Keltic, Coln being Latin derived from Colonia. But it must be noted that in this case, as well as in all others in which names of places of Latin origin still survive, the value from an ethnological point of view is as great as if the name were Keltic. The Roman name could only have been learnt by the Saxons from Kelts.

the more disturbed condition of Western as compared with Eastern Ireland, forgetting that there have been many times when the East was troubled while the West was tranquil. But the explanation is one that should be resorted to only in the last extremity. It is worthy only of fatalists who want an excuse for folding their hands and doing nothing. The characteristics of race are in any case facts which we must accept, for we cannot change them. Let us make certain, before we despair, that they are as unfavourable as we have been hastily taught to believe.

W. LARMINIE.

SCIENCE NOTES.

THE CONVERSION OF SMOKE INTO WEALTH.

SCIENCE is still doing battle with the arch enemy of London and all our British cities. If popular intelligence and civic organisation were level with scientific effort, the smoke-fiend would be exorcised forthwith, and his annual slaughter of the poorer victims of bronchial irritability, and his expatriation of wealthy sufferers, would cease! Ornamental architecture would become possible in English towns, and trees and garden plants might flourish in them as in countries where wood fuel is used.

I have already described the device of Dr. Siemens, which succeeds completely when fairly carried out. It can be carried out by private individual effort. Another equally effectual scheme has been proposed and ably advocated by Mr. Scott Moncrieff, but this demands corporate action, which will be a great advantage where capable corporations exist, but is not so hopeful in our metropolis, the government of which is so complex and indefinite.

A few preliminary explanations are desirable in order to render Mr. Moncrieff's scheme fully intelligible.

When ordinary coal is heated in a closed vessel like a gas retort, "*destructive distillation*" occurs, a distillation unlike that which takes place when water is similarly heated. The water is simply converted into vapour of water, which when cooled returns to its former condition of liquid water. The vapours or gases given off by the distillation of coal are not vapours *of* coal, though vapours *from* coal; they have a different composition from coal, and cannot by any artificial effort be restored to the condition of coal. They are very various, and not exactly alike for any two successive periods during the distillation. First of all comes vapour of water, mingled with more or less of ammoniacal and tarry matters. These vary with the temperature. Then comes inflammable gas and tarry or naphthalic vapours, with less water and ammonia; a mixture that burns with a lurid smoky flame, depositing great quantities of soot. As the distillation proceeds, the quantity of water and ammonia

diminishes, and the gaseous products become less carbonaceous ; the tarry and naphthalic products also diminish, and finally cease to come over, the gas becomes lighter, still less carburetted, and has much smaller illuminating power when refined. If the process is continued long enough, and the temperature is sufficiently high, a gas is at last obtained that will burn only with a blue flame like that of a spirit lamp.

One of the means by which we may be, and have been, victimised by the gas companies, is founded on the difference of products. Just when the weather is foggy and we require more and better gas, the distillation may be pushed on into the stage at which great deterioration of gas takes place ; a larger volume of inferior gas is thus produced from a given charge of coal. I say that this has been and may be done, but do not assert that it is always done, knowing that some of the gas companies keep a supply of rich cannel in winter stock, in order to meet the fog demand. This cannel yields much more gas with given plant and labour than ordinary coal, and it has a higher illuminating power. By its means the customary average quality is obtainable by admixture with the weak gas above described.

Mr. Moncrieff proposes that all the coal to be used in great towns shall first pass through the gas works, not to be distilled down to dry coke as at present, but to be partially distilled.

Taking, for example, a sample of coal capable of yielding 10,000 cubic feet of gas per ton, he would stop the distillation at one-third of that quantity, but pass three times as much through a given number of retorts. The result of doing so, he says, "is startling."

In the first place, the companies will have double the quantity of tar and ammoniacal liquor, and we shall have 24-candle gas instead of 16-candle gas, the first hydrocarbon products having so much more carbon than those run off later, and consequently burning so much more brilliantly *when purified*.

The semi-coke remaining behind will light more readily than raw coal, and far more so than exhausted coke. Every skilled housemaid knows this, and accordingly, in "laying" a fire, selects partially burned coal to place next to the wood. It will give out more heat than raw coal—20 per cent. more, Mr. Moncrieff states—and make a more cheerful fire without smoking.

This difference is due to the removal of the bulk of the water, ammonia, and those heavy tar products which, as above stated, burn in their unpurified state with such a lurid, smoky, and sooty flame. The domestic combustion will commence after the smoke-producing

materials have been withdrawn from the coal, and when the brilliant stage with which we are all familiar when a fire has well "burnt up" is reached.

Mr. Moncrieff estimates the total consumption of London at six millions of tons per annum, two millions of that being consumed at the gas works; one million of which is resold as coke, and 20,000 millions of cubic feet as 16-candle gas.

Upon the basis of these figures he shows that under his scheme the saving to the public, due to improved quality of gas (from 16 to 24 candles), will amount to £1,750,000 per annum in London, allowing 3s. 6d. per 1,000 feet as the average price.

The gain in tar products and ammoniacal liquors is estimated at £375,000. Adding to these the nett gain upon the fuel, gives a total balance in favour of Mr. Moncrieff's scheme of £2,125,000 annually, which, as he says, "may be taken as the yearly value of London smoke," which he proposes "to convert into useful products *by the plant at present in use.*"

I have not troubled the reader with the details of the figures upon which this remarkable conclusion is based, but may add that I have examined them critically, and believe them to be substantially correct, if we say two millions after allowing for extra wages of retort chargers, and incidentals connected with the storage and redelivery of the semi-coke by the gas companies. This conclusion is based upon some practical experience in the commercial distillation of coal.

The saving effected by cleansing the atmosphere of London, and mitigating the density and insalubrity of its fogs, by withdrawing the irritant tar film that coats their particles and gives them their pea-soup character as distinguished from white country mists (see "Gentleman's Magazine" of November last, page 631), is not so easily calculated, as the value of personal health and comfort, and architectural and general cleanliness, is so differently estimated by different people. Very cheap at ten millions, say I!

The only objection I see to this scheme is that, in London, it would confer too much power on the gas companies whose monopoly needs curtailment or abolition rather than extension. Most of the great towns of the North make their own gas and supply their own water, as all civilised communities should do. These are in a position to carry out this great public reform, and simultaneously diminish the local taxation by the aid of the additional gas profits.

The Corporation Gas Works of Birmingham are managed very energetically and ably. I lately witnessed a fine display of gas

lighting around the Town Hall and before the Midland Institute and the Corporation buildings. It was far superior to our electric lighting of the Thames Embankment. This was due to the greater illuminating power of the gas and to the arrangement of burners, &c. Jet for jet of given construction, and consuming equal quantity of gas, the citizens of Birmingham obtain 30 or 40 per cent. more light than we do. Mr. Moncrieff's scheme would give us 50 per cent. more.

Let us hope that this and some of the great Yorkshire and Lancashire towns that have already taught us how we may profitably supply ourselves with gas will, by means of their corporate gas works, show us practically how to purify our dirty atmosphere, and to convert its dirt into substantial wealth.

A VEGETABLE SUBSTITUTE FOR GASTRIC JUICE.

THE pepsin of pigs which is prepared for the use of dyspeptic sufferers appears to have some actual power in assisting digestion, but it is very costly, and, like most costly things, is liable to adulterations, on account of the temptations presented by high prices. Besides these, it cannot be agreeable to sensitive people to be thus dependent upon the secretions of a pig's stomach.

There is some prospect of a cheaper substitute being found, and one that can give rise to no unsavoury reflections.

M. Bouchot, in a paper recently read at the Academy of Sciences, describes some experiments made with the milky juice obtainable from common fig-trees, some of which he collected in Provence in April last. He mixed one-sixth of an ounce of this substance in a partially coagulated, syrupy, sticky state, with two ounces of distilled water. To this he added one-third of an ounce of lean meat, keeping the mixture at about the heat of the body. In less than twenty-four hours the meat was completely digested, leaving only a white pulpy residue. More and more meat was added to this same mixture, till the total quantity reached ninety grammes—a little more than three ounces. Each successive quantity was, like the first, completely digested in twenty-four hours, and left a similar residue. The liquid showed no signs of fermentation or putrefaction.

Four months have elapsed since the reading of this paper, but, as far as I am aware, no further notice has been taken of it in the form of practical application. The subject appears to me to be worthy of very serious attention and exhaustive research. If the

juice of the fig-tree can thus effect digestion, it is notable that the juices of many other trees may do likewise, the fig-tree being only one member of a large natural order; all trees exude more or less of juices which, when partially coagulated by drying, form a "white sticky resinous aromatic coagulation," like that upon which M. Bouchot made his experiments.

It is in the spring time that this exudation is most active, and the investigation should be followed up at once. As there is nothing offensive in the diluted juice of a tree or a bush, and no decomposition accompanies the solution of the meat, the dyspeptic patient might have his dinner wholly or partially digested before eating it, provided the solvent action of the vegetable juice is as much like chymification as it appears.

FUSION OF STEEL BY ATMOSPHERIC COLLISION.

WHEN I was a wondering boy, and revelled in the glories of the Polytechnic *as it was*, one of the daily repeated experiments was the cutting of hard steel with soft iron. A smooth-edged disc of soft iron was made to revolve with great velocity, and a large, thick steel file, or rasp, was pressed against its edge. A magnificent volley of brilliant sparks was shot forth in the direction of the motion of the edge of the disc, and a deep wide notch was speedily cut in the hard file.

This experiment has lately been revived in America, but on a taller scale, of course, and coupled with a startling theory and a new name, viz. "Reese's Fusing Disc." This disc is 42 inches in diameter. The old Polytechnic disc, as nearly as I can remember, was between 12 and 18 inches. Reese's disc is said to make 2,300 revolutions per minute, giving a peripheral velocity of 25,000 feet per minute. I do not remember the velocity of the Polytechnic disc. It was, however, very great, and its action resulted from its great velocity. Rails, whether of iron or steel, are now commonly cut to their required lengths by means of a rapidly rotating circular saw. The cutting through of a full-sized rail is effected in two or three seconds, and a brilliant display of sparks accompanies the operation.

Mr. Reese states that if a circular bar of steel be made to turn in a lathe, so that the direction of its surface motion shall be opposed to that of the disc, the steel is cut through by an act of fusion; and that this fusion is not effected by any friction between the actual surfaces of the two metals, but by the air between them. He bases this conclusion on the measurements he has made, showing that a

disc only $\frac{1}{16}$ th of an inch in thickness cuts a groove which is $\frac{1}{8}$ th wide, leaving a clear space of $\frac{1}{8}$ th of an inch on each side of the disc. By carefully adjusting the disc-mandril on firm centres, and with similar adjustment of the bar, so that there should be no shake between them, it is easy to ascertain whether there is any similar space between the edge of the disc and the bottom of the groove. Mr. Reese has done this, and finds there is a clear space of one-eighth of an inch.

This appears very surprising, and has already provoked some scepticism. I do not share the scepticism, nor even the surprise, having made several experiments, proving that many substances carry with them an obstinately adhering film of air, which probably exists in a state of considerable condensation upon their surfaces. One of my favourite class experiments (an original one, and I believe new when I first made it 25 years ago) was to take a card and hold one side of it above the flame of a candle until it became blackened, leave it to cool, and then immerse it in a tumbler of water. Viewed obliquely, the black side appears like burnished silver. This is due to an adherent film of air, the stubborn adhesion of which is proved by the fact that the card may remain for some hours in the water, and when withdrawn is perfectly dry. The silvery appearance is due to the fact that light cannot pass from water into air at angles exceeding a certain degree of obliquity without stultifying the mathematics of its refrangibility by these media. Rather than do this it turns back, and is *totally* reflected more completely than from a plate of burnished metal. To prove this, take a tumbler filled with water, hold it above the level of the eye, and try to look obliquely through the water at any object in the air above. You will utterly fail to see it.

Another experiment shows how air adheres to iron. Take some iron filings, sprinkle them lightly on the surface of water, and they remain there in spite of their density. Or take a needle or piece of thin sheet-iron and drop it evenly and carefully on a water surface. It remains there apparently floating, but not truly, as may be seen by looking along the water surface. Each grain of the filings, or the needle, or strip, lies in a depression of the water surface. They have partially sunk, but in doing so have carried with them a small adhering atmosphere of their own, which buoys them sufficiently to prevent immersion and further sinking. Many other experiments of similar kind may be made, proving that air adheres to iron, and that its removal demands some time and force. The effect of time is shown by the difference of friction between two smooth iron sur-

faces at the first moment of contact, and after they have pressed upon each other for a few minutes. At first they slide, as though admirably lubricated, but presently obtain a frictional grip. The lubricant was the film of air adhering to each, and requiring some time for its expulsion.

This condensed adhering atmosphere, moving at the rate of 25,000 feet per minute with the edge of the disc, and meeting another similar atmosphere of the oppositely rotating steel bar, and both striking each other, must produce a tremendous condensation at the meeting-place immediately between the two surfaces. Now, we know that when air is suddenly condensed it evolves an amount of heat proportionate to the condensation, this being sufficient in the case of the common experiment of the fire syringe worked by simple hand pressure to reach a full red heat. The condensation in this case must vastly exceed this, and, as it appears to me, fully explains the superficial fusion of the steel, and the fact that this occurs without actual contact of the metallic surfaces.

Mr. Reese offers an explanation, attributing the fusion to the air, which, "by virtue of the motion of the disc, is thrown outward in radial lines and is projected from the periphery." Of course I consider that my own explanation, as given above, is better than this. If I am right, the experiment affords an interesting artificial modification of what happens when a ferruginous aerolite visits our world. It strikes our atmosphere with such velocity that the collision fuses its outer surface, as may be seen by examination of the splendid collection of these mysterious visitors in the British Museum.

There is one element of fact which I think requires some further examination. Mr. Reese states that when the revolving bar is thus cut through, the fragments discharged are metallic iron or steel, and not oxide. I find it impossible to believe this, knowing what in all other cases happens to small particles of fused iron or steel when exposed to the air. They become wholly or partially (according to their size) converted into *magnetic* oxide. This oxide is so much like metallic iron that Mr. Reese's description may be a mistake—one that may easily be made, if the mere outward appearance of the fused globules and their obedience to the magnet be relied upon.

The directors of the Polytechnic will do well to rummage among their stores to find, if possible, their old disc and set it spinning again, as the interest in the subject has been revived by Mr. Reese's experiments.

ARSENIC AS A PIG-FATTENER.

ARSENIC and antimony are two metals very closely allied to each other. They are in fact chemical twins, both as regards their chemical relations and the physiological and general properties of their compounds.

A weird story is told of Basil Valentine, the celebrated chemical and alchemical abbot, who discovered the metal antimony about 400 years ago. He was in search of the great arcanum, the essence of metals, the *aurum potabile*, the drinkable gold, the zoecone of the period, by means of which the human body should acquire the imperishable properties of the king of metals, and thereby become immortal. His discovery of a new metal produced from compounds hitherto supposed to have no metallic constituents seemed like a step in the direction of the eagerly-desired transmutation, and he accordingly tried how it operated upon the monastery pigs, by mixing it cautiously with their food.

They flourished, their hides grew fair and sleek, their eyes more brilliant, and they fattened charmingly. This success encouraged him to take one step further by adding a similar condiment to the rations of the monks. They improved like the pigs, especially in complexion and plumpness. He, therefore, increased the dose, until at last it proved fatal to a considerable number. As there were no newspapers in those times, the precise amount of that number is not reliably recorded, but it was sufficient to give to the new metal the name of "*antimoine*," i.e. "antimonk," which it still retains, and which clings to it more tenaciously than its Latin name *stibium*.

Horse-dealers, dog-fanciers, and others, still use it for improving the apparent condition of their wares, and it is hinted that prizes have been obtained at horse and cattle shows by its aid. I should add that this statement comes from disappointed candidates, not from the prize-takers themselves.

Arsenic has been similarly used in preparing bipeds for the matrimonial market, and we are told that the Styrian peasants take it habitually; the women for improving their complexions and plumpness, and the men to improve their "wind" when ascending steep mountain slopes. The use of arsenic is common among grooms and coachmen in Vienna. They believe it to give a glossy and sleek appearance to the coats of horses, and when a small piece of the white oxide is tied up in a piece of linen and attached to the bit, it produces that foaming at the mouth which some people admire.

The subject has been recently investigated in Germany by C. Gies.

He experimented on rabbits, fowls, and pigs, by mixing with their food constantly increasing quantities of arsenic acid. This was continued for four months, and all the animals became fatter. The growth of bone was constant in the younger animals; and in cases where the bones would otherwise have been spongy, they became compact. Stall-fed animals displayed these results very remarkably. The arsenic was freely given out through the skin and the lungs; full-grown animals displayed a fatty condition of the muscles of the heart, liver, kidneys, and spleen, and an increase of the more superficial fatty deposits. When the doses were further increased, symptoms of chronic poisoning commenced. These experiments confirm the experience of Basil Valentine, the horse-dealers and the grooms; but whether it will pay the hog-growers of Chicago to improve their exports by this application of economic science is doubtful. Fortunately for their customers, the pig can only take a limited quantity, and this is altogether insufficient to do any damage to those who afterwards eat him, as the largest eatable quantity of roast pork, ham, or bacon cannot contain enough of the drug to have any perceptible effect upon the human pork-eater.

The mode of action of arsenic in the animal body is still an open subject. It is supposed to act by checking the natural waste and diminishing oxidation: thus some of the carbonaceous products that would otherwise be oxidised and carried away as carbonic acid remain, and are deposited as fat; and the checking of oxidation gives less work for the lungs, and thereby enables the climber to do with less oxygen or less respiratory effort.

The well-established fact that a small quantity of arsenic acid checks animal decomposition so effectually that it is used by ornithologists for preserving the skins of birds favours this view. I have seen Mr. Gould filling the skulls of some of his "Birds of Europe" with cotton-wool dusted with arsenic, after the brain was imperfectly removed, and lightly dusting the inside of the recently removed skins with the arsenic. He assured me that nothing else is so effectual, and that skins thus prepared may be packed together and preserved in any climate for an indefinite length of time. I should add, by way of precaution to amateur naturalists, that if a small quantity comes in contact with a slight cut in the hand, or even where the skin has been grazed, the consequences are serious—may even be fatal.

W. MATTIEU WILLIAMS.

TABLE TALK.

I HAVE before me a copy of Mr. Ruskin's collected newspaper letters, issued in two sumptuous volumes, under the fanciful title of "Arrows of the Chace," and edited by an Oxford pupil. Unlike Mr. Ruskin's other works, the book is issued in paper-boards, with the edges uncut, and is altogether produced in so handsome a style as to merit the appellation of a *livre de luxe*. The contents are of unusual and exceptional interest, containing passages as brilliant and eloquent as any in Mr. Ruskin's more laboured writings. The editor has rendered a great service to literature in collecting and publishing these letters, which he has done with Mr. Ruskin's full sanction and approval, but without his superintendence. The author of the letters has, however, been induced by his "immitigable editor" (as Mr. Ruskin styles him) to write a very characteristic preface to the collection, and a still more characteristic epilogue, in which he gravely and elaborately defends the now celebrated Glasgow letter, with which the second volume closes, and which lately puzzled and startled the world, and shocked even some of Mr. Ruskin's most devoted admirers. The editor has printed, without exception, every letter referred to in Mr. Shepherd's "Bibliography of Ruskin" (his obligations to which work he gracefully and gratefully acknowledges in his introduction), and some further letters written or brought to light since the publication of the latest edition of that manual. These letters are arranged topically, not chronologically. They extend over a period of forty years, commencing in 1841 (not 1840, as the title-page erroneously implies), and deal with a large variety of subjects connected with art, science, literature, politics, political economy, and geology. They are a curious key to their author's mind in its successive stages and developments, and will be read with eager interest by all his disciples and admirers, to whom the book will be an inestimable boon. An admirable and copious index is appended, extending over some forty pages. It seems ungracious to find any fault with such a welcome gift; but I regret to be compelled to add that the volumes are disfigured by some rather ugly misprints, which might easily have been avoided.

It is a pity the editor did not ask some literary friend to read his proof-sheets before passing them for press, and so save us from such eye-sores as "Rosetti" for "Rossetti," and "Pentalici" for "Pentelici." The annotations are for the most part modest and useful, neither too sparse nor too copious, and, what is most important, thoroughly correct and reliable in all their details. The book is not published in the usual way, but can be had by writing to Mr. George Allen, Sunnyside, Orpington; an obscure village in Kent, which Mr. Ruskin has succeeded in making famous.

I FIND that Mr. R. H. Shepherd, whose labours have thus borne fruit, has just added a third to his series of Bibliographies of illustrious English writers. The new Bibliography of Thackeray, "a bibliographical list, arranged in chronological order, of the published writings in prose and verse, and the sketches and drawings of William Makepeace Thackeray from 1829 to 1880," will be an important and welcome acquisition to students and collectors, and to the latter an indispensable *vade-mecum*. A few large-paper copies are printed, to match with the sumptuous *édition de luxe* of Thackeray.

IT is extraordinary how well-meaning zealots will persist in putting weapons into the hands of their enemies. Sir Thomas Chambers, at a conference of Sunday-school teachers "and others," has been observing that the "dulness" of London Sundays is "a great comfort to a Christian man." This is a confession that will delight High Church people as well as unbelievers, exceedingly. It has always been urged against Protestantism, in its Presbyterian form, that it is cheerless and "dull," and here we have a professor of the faith glorying not in it, but in its defects. A very great divine has said that if Heaven takes no delight in man's wisdom, still less does it do so in his stupidity. But Sir Thomas, it seems, is of the contrary opinion. The duller he is, the better he is. If he is right, I can only say that I know a number of most excellent people. "The shops are closed; all the indications of Sabbath observance in England," he says, "are satisfactory." Sir Thomas either omits, from conscientious motives, to walk in the streets on Sunday, or, unlike other dull men, he is very easily pleased.

STRONG interest is always felt by the public in cases in which an actor dies upon the stage. That this should be so is natural. The strange contrasts of what Mr. Browning calls "this pageant

world" are never so grimly illustrated as when one who is presenting the simulated throes of death is seized upon by the King of Terrors, nor does the Dance Macabre afford an instance of irony so striking as that furnished by Death and the actor. Special risks have, of course, to be faced by the histrion. Of these no insignificant percentage is attributable to the carelessness of those in authority behind the scenes of a theatre. In a country town in France an actor recently dropped dead upon the stage. A charge had been left in a pistol employed in the course of the piece, the well-known melodrama of "Les Pirates de la Savane," in a version of which Charles Mathews appeared at Drury Lane. The natural result followed, and the man at whom the weapon was levelled fell on the stage a corpse. Not the first accident of the kind is this. Actors have been blinded by the discharge of powder when there was no charge—so called—in the gun. There can surely be no reason, since noise is all that is required, why stage firearms should not be mimic weapons, incapable of containing a charge, and made simply to strike a detonating ball which shall convey to the audience the idea of a shot. Danger in the case of firearms on the stage is not confined to the actor. The public runs a risk only less great. In the course of a conflict with swords even, I have seen the weapon of Stanley, who was fighting with Richard III., struck from his hand with such force as to fly into the stalls. Fair risks of life a man must encounter as he may. That he should be subjected to unnecessary danger involves carelessness amounting to criminality.

VERY striking is it to see how nearly identical has been the development of the drama in ancient and modern times. Between the performances of classical drama in Rome and Southern Italy, and the appearance of the modern drama in the first rude sketch of the shape it now assumes, there was a short period of absolute blank. Recent discoveries have tended to abridge that period but not to do away with it. When, accordingly, after the return of barbarism, the drama reasserted itself, it was under conditions precisely the same as those which marked the formation of the Greek drama. Both tragedy and comedy sprang from the song of the parted choir in the worship of Bacchus and of Ceres. In the same way, the earliest specimens of the liturgical drama of mediæval times sprang out of the antiphonal utterance of the choir in the celebration of Catholic worship. In England, records of Catholic ceremonial are few, and we have no such instances of the first intrusion of a dramatic form into worship as other countries. So early as

the tenth century the Adoration of the Shepherds was presented in the church, assumably before the Introit. "Quem quæritis in præsepe, pastores? dicite" ("Whom are you seeking, shepherds, in the manger? tell us") asked a portion of the choir. To this the other portion responded: "Salvatorem, Christum Dominum" ("The Saviour, Christ the Lord"). Here is an unmistakable commencement of the liturgical drama which, in the following centuries, took possession of the churches. It is, moreover, as I have said, precisely the same rudimentary shape which was witnessed in Greece. I cannot in "Table Talk" carry out the parallel or furnish further illustrations. As our English historians refer to nothing in the nature of drama earlier than the late years of the twelfth century, rude commencements like that I supply are worthy of being cited.

ABOUT three months ago I folded up a newspaper and put in a closet some fairly valuable books. They were, indeed, the publications of the Hunterian Club. A day or two ago I opened out a parcel, and was astonished to find that the arch-enemy of books, the book-worm, had got to one or two, and had perforated the cover and exterior papers. Yet, though the mark was quite fresh, my enemy was nowhere to be seen. I am as much at a loss to account for his disappearance as for his presence. I wish Dr. Andrew Wilson would take to studying the habits of these mysterious creatures and teach us something concerning them beyond what we know to our sorrow. That the book-worm is, as might be supposed, a maggot, I learn from Mr. Westell, the bookseller—the only person of whom I have heard who has seen one.

SO much interest is attached to the representation of a new drama by the Laureate, that it seems worth while to supply from the "Morals of Plutarch" the story of Camma, which forms the basis of the play now in course of performance at the Lyceum. For this purpose I use the translation of Philemon Holland, since the labours of Sir Thomas North did not extend beyond the "Lives." I leave, of necessity, a few gaps in the narrative. Nothing of the slightest importance is, however, omitted :

There were in times past two most puissant Lords and Tetrarchs of Galatia, who also were in blood of kin one to the other, Sinatus and Synorix. Sinatus had espoused a young virgin named Camma, and made her his wife; a lady highly esteemed of as many as knew her, as well for the beauty of her person as the flower of her age . . . and that which made her better reputed and more renowned was this, that she was a most religious Priestesse of *Diana* (a goddess whom the Galatians most devoutly honour and worship), and also in every

solemn procession and public sacrifice she would always be seen abroad most sumptuously set out and stately adorned. It fortuned so that Synorix was enamoured of this brave dame, but being not able to bring about his purpose . . . the divel put in his head to commit a most heinous and detestable fact: for he laid wait for Sinatus and treacherously murdered him. He stayed not long after, but fell to wooing of Camma, and courting her by way of marriage. She made her abode within the temple at that time, and took the infamous act committed by Synorix, not piteously, and as one cast down and dejected therewith, but with a stout heart and a stomach moved to anger, and yet considerately, waiting the time and opportunity of revenge. On the other side, Synorix followed his sute very earnestly, solliciting and entreating importunately. Neither seemed he to alledge vain and frivolous reasons, but such as carried some colourable pretence of honesty, namely, that he had always showed himself a man of more valour and worth than *Sinatus*: and whereas he took away his life, induced he was thereto for the exceeding love that he bore Camma, and not moved thereto by any malice otherwise. This young dame at first seemed to deny him, but yet her denials were not very churlish. . . . To be short, in the end she gave her consent, and *Synorix* was sent for to come unto her, where she kept her resiance, that in the presence of the said goddesse the contract of marriage might passe, and the espousals be solemnized. When he was come she received and welcomed him with an amiable and gracious countenance, had him unto the very Altar of Diana, where religiously and with great ceremony she poured forth before the goddesse a little of a potion which she had prepared out of a bowle. The one part thereof she drunk her selfe, and the other part she gave unto *Synorix* for to drink. Now, this potion was made mingled with rank poyson. When she saw that he had taken his draught, she fetched a loud and evident groan, doing reverence also unto the goddesse. I protest and call thee to witnesse (quoth she), most powerfull and honourable goddesse, that I have not survived *Sinatus* for any other cause in the world but only to see this day; neither have I had any joy of my life all this while that I have lived since, but only in regard of hope that one day I might be revenged of his death, which seeing that now I have effected, I go most gladly and joyfully unto that sweet husband of mine; and as for thee (most accursed and wicked wretch in the world), give order to thy kinsfolk and friends in stead of a nuptial bed to provide a grave for thy burial. The Galatian (hearing these words, and beginning withal to feel the operation of the poison, and how it wrought and troubled him within his bowels and all parts of his body) mounted presently his chariot, hoping that by the jogging and agitation thereof he might vomit and cast up the poyson; but immediately he alighted againe and put himself into an easie litter; but did he what he could, dead he was that very evening. As for *Camma*, she continued all the night languishing, and when she heard for certain that he was deceased, she, all with joy and mirth, departed out of this world.¹

Few records of feminine action are more heroic than this. Whether it gains or loses in the course of dramatisation by the Laureate will be a matter of opinion.

SYLVANUS URBAN.

¹ *The Philosophy commonly called the Morals*, written by the learned philosopher Plutarch, of Chæronea. Translated &c. by Philemon Holland. Lond. 1657; pp. 412-13.

THE GENTLEMAN'S MAGAZINE.

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THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER VII.

“YOU SAW HER FAIR, NONE ELSE BEING BY.”

CAPTAIN MARION'S first idea, when he had got possession of money, was to begin to spend it. His impulse, however, always was to spend for the enjoyment of the people around him rather than his own. He had now fallen in for a good thing, as the result of his once disparaged American speculations, and he was very happy in the prospect of being able to live in a liberal and pleasant manner again. His good fortune brought him a double gratification. First of all, he had the money to spend, and the prospect of a secure and even a rising income; and next, he had the great satisfaction of being able to look boldly in the faces of the prophets of evil, who had kept saying, “Didn't I tell you so?” when he first put his money into American railways, and nothing seemed likely to come out. He was now able to claim for himself the proud possession of judgment and prescience in his speculations, and by his quiet composure of manner and his carefully abstaining from any reference to past censure, he could heap coals of fire upon the heads of those who once would have it that he had brought his family to ruin. He felt a certain satisfaction, too, in being again able to make something of a figure in the eyes of his own family. He had for a good long time been compelled, as he expressed it himself, to play second fiddle to his son-in-law, Mr. Trescoe, and he thought the time had now come when he was fairly entitled to take the leading position,

and to show that he could be head of the family in fact as well as in name.

All these considerations, added to a boundless good nature and an intense love for his daughters, made Captain Marion very happy in the prospect of their first season together in London. It was his intention that he and his two daughters and his daughter Katherine's husband should see out the season in London and then think about their foreign tour. He anticipated immense pleasure from showing his daughters and Miss Rowan everything interesting in London first, and on the Continent afterwards. He had taken a handsome furnished house, with servants and all just as it stood, in one of the streets running off Piccadilly, and meant to make himself very comfortable and even happy for the rest of the season. He soon had many visitors; he gave nice little dinner parties; and amongst the most frequent of his visitors, at regular and irregular hours, was Mr. Montana.

Mr. Aquitaine did not make much of a stay in London. He was always, as he called it, "on the wing." He came up for a day, disappeared for a few days more, to reappear nobody could tell how soon. A short time after the opening address with which Montana had introduced his great enterprise to the London public, Mr. Aquitaine, who had been staying with his daughter in Captain Marion's house, and was expected to consider it his home whenever he turned up in London, was about to make one of his sudden returns to the north. While smoking a cigar with Captain Marion one morning after breakfast, he was told that a gentleman wished to see him, and was handed a card.

"Now, look here, Marion, here's a young man in whom I take a great deal of interest, and there is an odd sort of story about him. He wrote to me the other day; he wants to be introduced to Montana; and if it is right to do the thing, you can do it for him better than I could. But I am not certain whether I ought to encourage him. He had better stay where he is, and not think of starting on adventures."

Captain Marion had a sympathetic interest in everybody going to do anything. He asked with some curiosity who the young man was, and what was his story.

"Well," Aquitaine said, "it's not much of a story, and yet there is a certain oddness about it. He was a very poor lad in my town, years ago; I believe his father and mother were people of education and good family, but they made a runaway match, and both died poor somehow, and left him. Just at the time of their death—the

father died latest—when this lad was seven or eight years old or thereabouts, a man that I knew in the town lost his son. The son disappeared. He had married a girl of good family—young Fanshawe's sister, by the way; you know young Fanshawe? She died. He disappeared. The old man had been thrown into acquaintanceship with this lad, and he was taken by a certain sort of resemblance in the two stories, somehow. He took the boy as his son, and has kept him ever since. He was a livery-stable keeper, and had horses, and made a lot of money, I believe, and he has settled in London now. I knew this young fellow well, and liked him. He used to come to our house, and—well, there is a lot more that I need not trouble you with. Anyhow, I will go and see him, and if I should ask you to introduce him to Montana, you won't mind doing so, will you?"

Captain Marion not only promised, but was delighted at the chance of a new recruit. Already in his mind he was filled with the idea of a romantic, generous, aspiring youth, determined to lend his hand in founding a great enterprise, and destined to be his own lieutenant, companion, and friend in the brilliant portentous movement which he saw before him in the enchanting distance.

Just as he was about to leave the room, Aquitaine bethought himself of something, and turned back.

"Before I go, Marion," he said, "don't you go putting any of your money into this scheme of Montana's. I am not saying anything against him; he may be very sincere; I dare say he is; but nothing will come of this; and you want your money for your daughters and yourself."

Marion was disposed to be a little evasive—at least, evasive for him. He was afraid of what he considered his friend's terribly practical nature and business habits. Aquitaine passed among the business men of his own town for somewhat of a visionary, because of his generous and charitable disposition.

"It isn't a matter of money," Marion answered; "it's a matter of faith and energy. I think it is a grand idea to start a new world there yonder in the heart of the new world; a place where the true laws of freedom and of health may be fairly tried out, as you know they never can have a chance of being tried under our old systems, even in America, not to say in England. You know that yourself, Aquitaine; I've heard you say twenty times that the laws of health have no fair chance of being tested here."

"Yes, the laws of health, to be sure; I've said that often enough. But, laws of health?—good gracious! your friend is going in for trying

out every principle known to the imagination of man ! Art, and science, and religion, and morals, and all the rest, are to be revolutionised. The city is to be like something in the Apocalypse, or in a fairy story. Streets of silver and gold, I believe."

"No, no, nothing of the kind."

"Well, will you promise me not to have anything to do with the whole thing—at least, until you see it tried and have some idea of what it will come to ?"

"No, I'll not promise that, certainly," Marion said warmly. "I should much rather promise to have nothing to do with it at all than to look coldly on until it had proved itself, and then to sneak in and claim a share in the glory. That would be like the sailor in the old story, who hid in a cask until the fight was over and his ship had won, and then crept out and asked how much prize-money was coming to him."

Aquitaine remained silent for a moment. Then he said :—

"One word, Marion—I never like worrying people with advice when they have their minds made up, as you have."

"It's not a question of having my mind made up ; it is a question of duty. All my life I have had a vague longing for some such chance as this ; and it has come. That is all."

"You have a mission, in fact ; quite so. Of course, in that case, I need not advise. Well, there is just this ; do you mean to pull your daughters into this business ?"

"I don't mean to pull them into it ; Katherine is very keen on it already."

"What does her husband say ?"

"Oh, well," Marion answered with a smile, "I suppose he says whatever she says."

"Are you all going to be among the pioneers of this interesting enterprise ?"

"I shall be among the pioneers or not in it at all," Marion answered resolutely.

"When are the pilgrim fathers going to take shipping? And where is the new colony to be founded ?"

"Oh, well, you know, things haven't come as far as that yet. There is a great deal to be done before we get to that."

"I see ; I am very glad to know that the site has not been fixed on yet."

"No ; that can be done later. As yet it is all but a thought in the mind of one man."

"Indeed ! A thought in the mind of one man ? I am pleased to know that ; may it long remain in that condition ! I am less

despondent about you all, now that I know that much. Only, I do beg of you, Marion, don't be carried away altogether by the advice of women in a matter of this kind. You are much too apt to be guided and governed by women. Do reflect that in such a case you ought to be the guide. You know how their feelings and sympathies carry them away. All the better they are for it, as far as feeling goes ; but they want some one to control them in a thing like this. They think Montana is a prophet and an angel because he has fine eyes and odd ways."

Marion smiled.

"A bad shot, Aquitaine. My womankind are greatly divided about this enterprise. Sydney is not clear at all about it ; and Geraldine—Miss Rowan—is dead against it ; she can hardly be got to say a good word for Montana."

"I am very glad to hear it. She has more brains than the lot of you put together. Excuse me, Marion, if I don't flatter you. I was afraid Montana had bewitched all your group of girls. Thank Heaven, Mrs. Aquitaine isn't a woman likely to be moved to any exertion of mind or body ; and I don't think my Mel. is a very susceptible little person."

"Does Melissa take no interest in all this ?" Captain Marion asked, with a certain hesitation. He had had hints from his daughter Katherine which would not have conveyed that impression.

"No ; not the least. I don't think she takes much interest in anything. Sometimes I could wish that she had a little more sentiment about her. She seems to me to have almost no feeling at all—in that sentimental way, I mean. Well, well, we can't have everything. It's very satisfactory to me just now to find that she isn't likely to be much interested in your new founder and prophet. Anyhow, I leave you with an easier mind, Marion, seeing that this grand enterprise is only in the air, so far. What are you going to call your new city, when it is built? Cloud-cuckoo-capital? Xanadu? or is it to have a name like the original name of Rome, which no men are to know or speak ?"

The friends parted soon after, each much concerned for the other. Captain Marion felt a certain doubt as to whether he ought not to give Aquitaine a hint that his daughter did not seem so absolutely unconcerned about the Montana project as he supposed ; but he did not know enough to justify him, he thought, in disturbing Aquitaine's mind with suspicion or alarm. It might be only a nonsensical idea of Katherine's. Katherine did not like girls, and always suspected them of something or other. If anything more were to come of it,

if the girl should really form a wish to go out to the new colony, Aquitaine must be consulted by her, and would know how to act. In any case, the colony was not likely to be founded for some time to come. There was time enough yet—and Marion usually got out of any mental perplexities by reflecting that there was time enough yet. He took it for granted that in any case Aquitaine would not allow his daughter to have anything to do with the enterprise; and there was no harm, therefore, to come of letting things alone for the moment.

Aquitaine was greatly relieved to find that the enterprise was not yet starting into real life. He knew enough of his friend to know that with time for a change of ideas the change might easily come. Still, he was disturbed about him. "On my life," he said to himself, "I wish he would marry that girl. It's absurd a man at his time of life, with a married daughter, thinking of getting married again; but I do believe in his case it would be the best thing he could do. She is a sensible and a clever girl; and she would make a capital wife, I am sure. She would keep him in order charmingly without his knowing it." In true masculine fashion Mr. Aquitaine never stopped to ask himself the question whether it was likely Miss Rowan would marry Captain Marion. Men usually assume that a man has only to ask and to have, except in the case of some woman of their own family, when they are apt to think of his proposal as like the fellow's impudence.

As he went to meet his visitor, Aquitaine kept looking at the visitor's card. It bore the name of "Clement Hope."

"No 'Mr.,' of course," Aquitaine murmured. "Rights of man, to be sure; equality, and all that. Exactly. Poor Clem.! Poor Clem.!"

He then entered a neat little reception-room and found poor Clem. himself.

Clement Hope was sitting in a great arm-chair, with his hands hanging listlessly down between his knees, and his eyes fixed on the floor. His whole attitude and aspect suggested uncertainty and despondency; suggested the condition of one who does not know in the least what to do with himself. Otherwise the young man, except for his dress, seemed as if he might have stepped out of a painting by Andrea del Sarto. Melancholy eyes, careless hair, a short moustache, a short peaked beard, a poetically loose collar, dark complexion, a sort of feminine gentleness of expression, contrasting curiously enough with a robust figure and strongly made hands and wrists—these were the principal characteristics of the figure at which Mr. Aquitaine now looked with a sort of compassionate friendliness.

They had a cordial, almost affectionate meeting.¹

"So Clem., my boy, you want to be up and doing? You want to join the enterprise of the great Montana?"

"Yes, Mr. Aquitaine—I want to do something."

"But why were you thinking about that just now? You could not possibly leave your father—I may call him your father?"

"You may, Mr. Aquitaine; he has been better to me than most fathers, I fancy. No, I should never think of leaving him, as things go now. That would never do."

"I should think not," Aquitaine said quickly. "You should be a precious ungrateful fellow if you were to think of leaving him—and I know you are not ungrateful, Clem." He hastened to add this, for the young man's cheeks reddened.

"I would go into the pit of Acheron for him!"

"Hullo!" Aquitaine interrupted; "pit of Acheron?"

"Well, why not pit of Acheron?" Clement said good-humouredly, but looking a little abashed at the manner in which his emphatic declaration was met.

"Why not, indeed! Only, it sounded a little poetic, didn't it? Are you taking to poetry, my boy?"

"Oh, no, I wish I could!"

"Well, you can read and enjoy it—that's enough."

"Yes, I can do that—thank Heaven."

"You are in earnest," Aquitaine said.

"Yes, I am in earnest about everything. I mean all I say, Mr. Aquitaine; I feel all I say."

Their eyes met sympathetically.

"I am sure you do; I am sorry for it sometimes," Aquitaine replied. They had some little secret between them, evidently.

"You have not got rid of that nonsense yet, then, I suppose?" Mr. Aquitaine said, after a moment of silence.

"You mean about Miss Aquitaine?"

"I mean that. That is the nonsense."

"No, I have not got rid of that. I mean to carry that always with me. It isn't nonsense; at least, of course, I know it would be nonsense if I were really foolish enough to fancy that anything could come of it. But you know, Mr. Aquitaine, I never did that; you know I never spoke a word of it to any one but yourself; and only to you to explain what might have seemed strange and rude, perhaps, otherwise."

"My good boy," Aquitaine said gravely, "you know what I think of your conduct. You know I think you acted like a true

gentleman and a splendid fellow. If I had a son, Clem., I should have wished him in such a case to act exactly as you did, and not otherwise. I should have been proud of him ; I dare say I should have thought him too good for any girl that ever put on a petticoat. I think so of you. When I speak of nonsense, it isn't anything about the money Melissa may have, or the sort of thing that is called position in a provincial town. In my place we all earn a living one way or another ; we have no gentlemen there, unless you come to the county families, who in their hearts don't recognise much difference between Melissa's father and yours. I don't mean that ; I mean that the thing wouldn't suit at all. Melissa isn't your form, take my word for it. The child is my darling little daughter ; but I can see with half an eye that she has more faults than she has dresses—even."

"Please don't, Mr. Aquitaine."

"You would rather think she has no faults, I dare say. But, after all, I fancy I am a good deal fonder of Melissa than you are——"

Clement shook his head.

"Well, I shall be fonder of her two years hence than you will. Oh, yes ; you need not protest. We have all suffered in that way and got over it. I tell you, Clem., I like you so well that if everybody else concerned in the matter was willing, and you had more money than they could count on 'Change in half a day, my advice to you would be not to marry Melissa Aquitaine. Come, it isn't often a father has given advice like that, is it ? But it is sincere. I know my little girl better than you do, and I don't believe she could make you a good wife. I don't think she is capable of much love. I don't think she could put up with anything or be of one humour long. I sometimes think she is incapable of loving—and for *his* sake, whoever he may be, I should almost wish it were so. There ! those are my sentiments."

"All the same, I love her."

"No, you don't. I know you think you do ; but you don't."

"Perhaps you know what I feel better than I do myself," Clement said, with a melancholy smile.

"I know much better than you what the strength of the feeling is, and how long it is likely to last. Stuff and nonsense ! If I found you groaning with a toothache, and were to tell you that you would think the gout, if you had it, much worse, you probably wouldn't believe me. Perhaps you would ask whether I could judge of your feelings better than you could yourself. I should say, Yes ; and when you came to have the gout, you would know that I was right."

"The cases are rather different. You can't know what I feel, Mr. Aquitaine."

"Of course I know you think you feel more than anybody ever did before or ever will again. But, my good boy, that in itself is only one familiar symptom. That only confirms my view. We have all been like that. Come, come, you are in the age for falling in love ; and Melissa came in your way, and she is a pretty girl, and her very little pertnesses and ill-humours had a charm for you. Tut, tut ! I know all about it, you'll find. And you have taken her for your ideal. You are in love with your ideal girl, not Melissa Aquitaine. She isn't any one's ideal, even her father's."

"Well, anyhow, that's one reason why I want to get away out of this. I want to live in some earnest, active, striving sort of way ; I want to fight a stiff battle of life."

Aquitaine smiled.

"We miss those Saracens terribly," he said. "It was such a relief to every disappointed fellow in the chivalrous days to be able to go and fight the Saracens. Well, perhaps the West may help us out of our difficulty. You want to have a hand in Montana's project—his New Jerusalem—I suppose ?"

"I should like to know something about it. Of course I couldn't go now. I wouldn't leave *him* for all the objects in the world, unless he was quite willing. But I can't help always looking out for something that may turn me free to go wherever I choose."

"You are not speculating on his death, surely ?" Aquitaine said, with a certain surprise and harshness in his tone.

"No ; I don't like to think of such a misfortune as that. And happily we need not think of it ; he has splendid health, and has years and years before him, I hope. No ; I was thinking of something that would make him happy, and set me free to go and bury myself wherever I chose. I was thinking that some day his son will come back to him."

"Why on earth do you think that ?"

"Well, for one thing, he is firmly convinced of it himself. You see, he never heard any account of his son's death ; and he is convinced he will come back some day."

Aquitaine shook his head.

"Either he is dead long ago, or he has no intention of coming back. Why should he never have written ? Did he never write ?"

"Never."

"Then, why should he never have written if he meant to come

back? Oh, no; he is either dead, or he has married and forgotten all about the people at home. He has grown rich, and does not want to come back; or he is poor, and is ashamed. The chances are many to one, I should say, that he is dead."

"Still, if it should not be so—and he firmly believes it will not be so—I should feel sadly out of place here. There would be no need of me any more. I should feel in the way more than anything else. You have no idea how he longs for his son—every year more and more."

"What does your father want you to do?" Aquitaine asked.

"Well, that is the worst of it; he wants me to do nothing. He wants me just to stay with him always, and tells me I shall have plenty of money when—that is, afterwards, you know. But that seems to me an unmanly sort of life. I am hanging on, doing nothing——"

"You are learning something. You are studying, I suppose?"

"Yes, I am studying a good deal, and I should be happy enough if that seemed the right sort of thing to do. I can sit in a room with books half the day and half the night too, and be perfectly happy, but that doesn't seem the way that a man ought to spend his life. I am fond of books, but I am afraid I should never do anything in the literary line. I don't think I have any gift of poetry or prose, or anything else. I don't believe I have the gift of expression at all," Clement said despondently. "I am sure I couldn't paint a picture, or model a statue, or make a drawing for a house, or do anything of that kind. I can't expect to lead the life of a *dilettante* scholar in a library. I think I should make a good settler or an explorer—these are times when one may easily find something to do with energy and enterprise about it. But all that would only come up if what I told you of were to happen. If this young man should come back——"

"He would not be much of a young man now," said Aquitaine.

"No; I forgot about that. I was thinking of him as if he always ought to be what he was when he went away. If he should come back, I should be *de trop* in the business, to say the least of it."

"Did you ever see the son?" Aquitaine asked.

"I never saw him; no. I never even heard he had gone until afterwards."

"I never saw him," said Aquitaine; "at least, I never remember seeing him. I know he was in our office for some years; but there were a lot of people there, and I was about the world then more

than I am now, and my attention was never called to him. I do not even know what he was like."

"His father thinks he was like me," Clement murmured dreamily, "but that must be a mere fancy. I believe he was very good-looking."

Aquitaine looked quickly at the young man; but Clement was evidently not fishing for a compliment. There was a mirror near him; he had not even glanced at it. He was moodily looking down.

"Clearly that must have been a mere fancy," Aquitaine said, with a smile.

"Oh, yes!" Clement replied.

"Well—I am in a difficulty about you," Aquitaine said, "and I'll put it into plain words. I don't like the idea of your going out on this wild-goose chase to found your new Atlantis or whatever it is; and I should be terribly sorry to hear that you had left the kind old man who has been so good to you."

"I'll not leave him while he wants me; that's certain. Nothing on earth will make me do that."

"Very well; I quite believe you mean all you say. I don't like the chance of your being taken in tow by Montana either: I don't believe in him. But, then, I hate the idea of your wasting any more of your time thinking over this little crotchety girl of mine. Will you promise me to try to shake off that thought—to get rid of it once for all?"

"Why should I do that? It makes life sweet to me. It doesn't do her any harm. I shall never speak of it to her or to any one. But it is all I have that makes life dear—the thought of her."

"In Heaven's name!" Aquitaine exclaimed, "why don't you take to writing poems? It would be ever so much better; you could work off the nonsense that way. The rhymes take so much out of one! The most unmanageable poets of all are the poets who don't compose any poetry. My dear good Clem., will you promise me to begin at once a series of sonnets—a short series, only a hundred and fifty or so—to my daughter?"

"You laugh at me, but I don't mind."

"No; that's the worst of it; I wish you did."

"Because I know you mean it kindly. Nothing coming from you can give me pain."

"Oh, hang it all!—I know; because I am the father of HER. Well, listen, Clem.; you said you never would speak to her—Her, with a big capital—unless you had my consent. My dear boy, you have my consent. Nothing better could possibly happen to you than to

try your chance. If that doesn't cure you, nothing will. Go along, there's a good fellow, and ask my daughter to marry you. Faith of a heavy father—a somewhat heavy-hearted father now and then—if she consents, I'll not stand in the way; and neither, I can promise you, will her mother."

The young man's eyes had flashed fire for a moment, but then he became graver than ever.

"Now you really are laughing at me," he said, "and this is a sharper jest than the other."

"I am not laughing at you," Aquitaine replied, in a tone that was almost stern. "I am very much in earnest. I don't believe any one can cure you of this nonsense half so well as my daughter herself. Go to her; tell her in poetic language how much you love her; offer her your hand and heart—I have reason to believe you'll find her in a remarkably melting mood just now."

"I know well enough she would only laugh at me; I don't want to ask her; I don't want her to marry me, if it comes to that; why should such a girl think of a fellow like me? It would be a shame. I only want to love her."

"Go and tell her so," Aquitaine said, "and then let me hear from you again."

CHAPTER VIII.

ROMEO AND ROSALINE.

GOOD fortune and bad fortune had combined to make Montana what he now was. The buffets and the rewards had conspired to decide his fate, each the wrong way. The buffets did not either correct or discourage; the rewards did not satisfy. His personal beauty was perhaps his first stimulus to the belief that he must be destined for great things. He felt that the gods had set their seal on him by making him beautiful, as the Greek orator declared of Phryne. His love-match had shown him that he could impress women with a sense of his power. His grief and his disappointment had filled him with a despair which, while it lasted, was akin to madness. He had suffered intensely; sorrow, dull, protracted, seemingly hopeless struggle, and iron poverty had tried to bear him down. He had seemed as if destined to end a drear life by some death of utter misery. Yet through all his worst times he had felt the same faith in his destiny—in his mission. He was confident that he was tried in

the fire of adversity only that he might be made the stronger for some great work which was to be assigned to him.

Men more pious and far better instructed than Montana have also believed that in every sorrow inflicted on them there was only a purpose personal to them, to make them stronger for this world, or touch their souls so as to make them fitter for the next. The loved father perishes in his prime ; the wife of a man's youth is taken from his side ; the little daughter is snatched from the blossoming promise of her sweet childhood ; and the survivor, not content with bending to the will of the benignant powers above, and quietly believing that all must be for the best, complacently makes a moral special to himself, and assumes that others have been victimised in order that his poor little personality may have all the benefit. It does not occur to him to ask why any other should suffer in order that he might be made the better ; whether Providence may not have designs of a larger mould than those which concerned only his particular career. Montana was one of that class of suffering egotists. Any stroke of fate falling on himself or those he loved—they were not many—he assumed to be intended for his own special behoof, in order to fit him all the more for the great mission whereof the nature and object were yet to be disclosed. This almost sublime egotism sustained him. Prosperity came at once along various paths, and he took the prosperity as he had taken the suffering. He accepted it as a proof that he was destined for great things. His egotism case-hardened him against fear and against arrogance.

For a time, after the climax of his struggle had passed away, everything seemed to go well with him. He had made a fair repute in the American Civil War ; first having entered the campaign merely as a philanthropical attendant on the hospitals, and then serving as a soldier. He had taken up philanthropic land speculations after the war ; taken them up without any primary purpose of making money ; and even where the success of the philanthropic scheme was doubtful, the fact that money came in to Montana was beyond all doubt. He turned lecturer, became a sort of unconsecrated preacher ; and he drew fashionable crowds after him in the United States, even when he most earnestly proclaimed that he desired only the presence of the poor. He might have made a wealthy match easily enough at any time. Rich women had told him as much, and he had only drawn back. He gave away money freely and in large sums. His career seemed absolutely free from any evidence of personal object ; and yet, all who were not devotees in him distrusted him.

There were three orders of opinion concerning Montana. There

was first the enthusiastic worship of the devotee, which does not call for minute analysis. The devotees were, to be sure, chiefly women ; but they were not by any means women only. There were many men, wherever Montana was known, who believed in him as their hero, or prophet, or saint. There were business men who on his advice would have flung all their property into some speculation of which they had never heard the day before. There were men who would have voted for any candidate or anything on a word of recommendation from him. In this country we commonly think of the society of America as made up only of shrewd, eager-faced business men, who set the making of money above every other purpose in life. We hear little of that very considerable proportion of the men of every American community, who are as accessible to the influence of sentimentalism or emotionalism of some kind as the heroine of an old romance might have been. The worship of the devotees made one order of opinion. Then came a certain proportion of kindly unbelievers, who merely shook their heads and quietly said that Montana was crazed. Lastly came those, not a few in number, who declared him to be a mere quack, a particularly shallow impostor. It is surprising how many powerful arguments each believer could bring forward in support of his theory. Speak to each one in turn, and let him have it all his own way for the time, and he would give reasons that made conviction seem hardly to be avoided. Then speak to one of the other school, and you began insensibly to be drawn into a recognition of the soundness of his theory.

The impostor theory was greatly supported by the fact that Montana, in company, evidently kept a constant guard over his utterances. It would not need to be a very keen observer to see that Montana was always watching you and himself. He never answered a question promptly. He looked quietly at his questioner, and shaped his answer very slowly. Sometimes he did not answer at all—merely shook his head and slightly smiled, and could not be got to give any reply. It was impossible not to see now and then, by the expression of his eyes, that he was thinking what he ought to say, or whether he ought to say anything. On the other hand, his admirers, admitting all these peculiarities, saw in them only fresh evidence of sincerity and of inspiration. When, they asked, did Montana on one of his platforms ever want a word or an answer? What could be more rapid, instantaneous, than the flash of his decisive reply to the port-fire touch of a question? For what suggested difficulty in morals or in actual life had he not the quick

word of guidance for those who believed in him? This, too, was true. In ordinary society, his admirers said, he is simply a man *distract*, conscious of higher purposes and occupations, only enduring the dinner-table, and evading idle chatter.

Montana might have been the happiest man living on the earth. He had found himself suddenly lifted to that dangerous elevation, the height of his wishes. He was one of the most marked figures of a London season. Wherever he went people looked at him, and after him, and started as he passed, and called the attention of their friends to him, and whispered his name, and sometimes indeed did not even whisper it, but spoke it loudly enough to have hurt the feelings of a different sort of man, but only enough to thrill Montana with a new sense of his success. Women of all ranks paid court to him, and frankly conveyed their admiration of him. There was supposed to be something like a mysterious sanctity about his assumed character of leader, priest, and prophet, which rendered unnecessary the becoming reticence that would have had to be adopted in the case of a more worldly hero. A great many London men, too, of all ranks and classes, admired him and believed in him. He was a hero to a considerable mass of the working population, who had a dash of free-thinking in them. He was not robust enough to satisfy the ordinary Radical artisan of cities, but to those whose views of life were a little more shadowy, and a little less political, he served admirably as a hero and an orator. He was in society, passing through the very best of London society sometimes, and yet wholly ungoverned by its conventions and above its rules, even regarded as the more interesting because he thus set himself above its ordinances and paid them no attention. He had several little habits which at first made people stare, and always made some people angry, and forced others to smile, and yet in the eyes of his admirers seemed all the more becoming to his position. When he went to dine at a great house, he shook hands with the butler or the footman, as well as with the master or mistress, if the butler or footman happened to have become an acquaintance of his by attending any of his meetings. His manner was always stately, grave, and sweet. Nothing surprised him. He had the composure of a Red Indian chief, who disdains to be dazzled or even moved by any of the splendours of civilisation.

Montana's name was constantly in the papers. He attended meetings of almost all kinds which had any savour of philanthropy or the higher life about them, and he possibly committed himself to a good many movements and causes which could hardly have worked

very well in combination. His ambition had now nearly reached its crowning point. He was the hero of a London season, the prophet of a large number of faithful followers, the leader of a great new enterprise in civilisation, which had not yet become troublesome, inconvenient, or disappointing, for the good reason that it had not yet even begun to move ; and he was the idol of a great many admiring and attractive women. But there was one thought which disturbed him. He remembered past times more keenly than he could have wished. His passionate longing was to bury all the early past in actual forgetfulness. He hated to have to think of the origin from which he sprung. He detested the thought of his father having been a livery-stable keeper who gave lessons in riding. If his father had been dead he would easily enough have forgotten all about him, and might have satisfied his conscience by an easy kind of penitence, all the more easy to certain minds because, being unavailing and too late, it involves no considerable trouble or self-sacrifice. But he had found that his father was not dead ; was living just now in London. The thought constantly disturbed him. He could not be sure of forgetting the past, or burying the past, as long as this living link with it was present and near. Besides, despite all his egotism and his confused dreamings and aspirations, he had still some remains of a sensitive conscience. It stung him now and then to think that he knew of his father's existence, and not only did not go to him and announce himself as the long-lost son, but was anxious above all things never to meet him, never to be recognised by him, and never to have to face the terrible alternative of acknowledging himself the livery-stable keeper's son, or bluntly denying the relationship. It was brought home to his inner convictions sometimes, that if his father and he should meet in public, and his father should claim him, he would repudiate the claim and deny that he was his father's son. He struggled with this horrible thought and tried to escape it, as was his way, in dreams. Montana was a dreamer, and not a man of imagination. Had he had imagination, it would have fed itself on other food than his own morbid personality. It would have created images for him out of "the barren realms of darkness," and have peopled his lonelier hours with beings that might some of them have become his ideal and his guide. But he was merely a dreamer, and could think only of his own plans, and his past and his future ; and he brooded so on these, that the real was often not to be distinguished by him from the unreal. He began to persuade himself that his obscure past must have been but a dream. He was gliding into the conviction that he would be right in repudiating any claim which an obscure person professing to

be his father might venture to make. He could not endure the ridicule of such a revelation ; his cause must suffer by it ; it could not therefore be in the nature of things or the will of Heaven that one entrusted with so great a mission should be left a victim to men's scorn.

Meanwhile, his friendship with Captain Marion became closer and closer. His visits always delighted Marion, but did not seem otherwise to spread much joy around them. Geraldine Rowan avoided him as much as she could do without attracting attention. Melissa saw him only ; rarely was spoken to by him.

Melissa was growing daily paler, more languid, and more unsatisfactory in condition. Mr. Aquitaine many times thought it would be better to take her back to the country again ; but Melissa obstinately resisted : and when any little trial of strength of will arose, Melissa was in the habit of carrying the day. She did so in this instance, and she positively declared that she found herself much better in London than she would be anywhere else, and Mr. Aquitaine gave way. There was apparently nothing in her condition for which the doctor's skill could do any good. Melissa began by refusing to see a doctor ; and then, when by a variety of stratagems she was brought into the presence of a physician and induced to talk with him, he really found nothing to suggest any ailment which his craft could cure.

Mr. Aquitaine once took an opportunity of saying a word to Miss Marion, and urged her to try and find out what was amiss with his daughter. Sydney tried her best, but could not succeed. She was unable to put herself exactly into sympathy with her wilful little friend. Just about this time, Geraldine Rowan had been making up her mind to endeavour to establish something like a friendship between Melissa and herself. She had resolved, hesitated, resolved again, again hesitated ; but now a word from Miss Marion about her attempt and its failure decided her to try her best. She took Melissa by surprise, invaded her unexpectedly in her own room one day, and broke into the question at once.

"I am afraid you are not well," she said, "and I am sure Mr. Aquitaine must be uneasy about you."

"Has he made you his confidante?" Melissa asked, with eyes in which an anticipated controversy already sparkled.

"No, indeed," Miss Rowan said ; "he never spoke to me about it, but you seem to me to be out of health and spirits somehow ; and if that makes me uneasy on your account, think how much more uneasy it must make him."

"If my father is uneasy about me," Melissa said, "he can tell me so."

"Come, my dear girl," Miss Rowan said, "you might be more friendly with me. I believe they say here that you are sick, but I do not think so. I mean, I don't think you are sick in any way that a doctor could cure. I think you are out of spirits. I think something has gone wrong with you. Perhaps something has disappointed you; and surely these are things that one girl might well talk to another girl about. We are friends, are we not?"

"I suppose you mean it well," Melissa answered; "I dare say you do; you are just the sort of girl who means everything well. Everybody says you do everything well; but I do not. I seldom mean things well, and I don't think I am at all inclined to be a friend of yours."

"Yet I want to win your friendship very much," said Geraldine; "and I think I could deserve it. You have always shown yourself cold and unfriendly to me, but I don't mind that; I don't care for misunderstandings of that kind, and I don't a bit mind being met with an ungenial answer. I don't care about personal dignity. I want to be your friend."

"We can never be friends," said Melissa, getting up from her chair; "I hate you, and there is an end of it."

Geraldine was certainly somewhat shaken from her composure by this blunt declaration. To be told that one is actually hated, and told this by a little girl whose flashing eyes and trembling lips show that she means exactly all that she says, and at the same time not to have the least idea of anything which could give cause for such a feeling of detestation—this would be enough to disturb the nerves of even a philosopher. Geraldine was not a philosopher, but only a bright, good-hearted girl, who thought she saw a way of rendering a service, and was determined to go on if she could. She recovered her composure after a moment.

"Why do you hate me, Miss Aquitaine? I always liked you, and I am sure I never did anything that could make you feel so bitterly against me."

"I hate you all the same," said Melissa. She seemed to find a certain sense of relief in the declaration.

"But won't you tell me why? There may be some mistake. There must be. You have fancied I said or did something which I did not say or do. I am not at all a good hater myself; but if I did hate any one, I am sure I should tell the reason."

Melissa turned away and seated herself again in her chair. It was a great luxurious armchair, large enough to hold the portly frame

of some old-fashioned grandfather, or to embrace all the ample draperies of an eighteenth-century belle. Melissa curled herself up in it, and looked with her beaming eyes, her pretty face, and her pouting, impatient gestures, like some beautiful but dangerous little animal—a wild cat perhaps, or a snake, coiled up, and only waiting for a spring on some enemy.

Geraldine went over and knelt by the side of the chair, leant her head against it, and took Melissa's reluctant hand and held it firmly, as indeed she had strength enough to do ; and then said, in the soothing tone one uses with a sick child, " You must tell me why you don't like me. I will not let you go until you explain it all. I am quite determined there shall be no unkindness between you and me if I can possibly prevent it. You know how much I like your father, and I think he likes me."

" Of course he does," Melissa said ; " everybody likes you except myself, and that's just it : everybody likes you ; the people I like best in the world like you better than they like me."

" What people that you like best in the world," Geraldine asked, " like me better than they like you? Your father is intensely fond of you. I never saw any one more fond of a girl ; and your mother, and everybody I know. How could they care for me in that way? I am only a girl to whom they are friendly, and whom they saw for the first time a few weeks ago, and soon won't see any more. How can you grudge me their passing kindness?"

" No, it is not that," said Melissa; " it is not for my father. It is for—for everybody."

And Melissa burst into a passion of tears.

Geraldine was touched to the heart by this sudden and unexpected outbreak. Now she felt sure indeed that poor Melissa's trouble was of the spirit and not of the body ; but what could she do to soothe her? How could she ask her for a confidence which, for aught she knew, might concern some family tale not to be told to any stranger's ear? Melissa's own words showed that it had something to do with herself. Could it be that Melissa was jealous of the friendship which the Marions, father and daughter, showed to Geraldine? This seemed hardly possible ; and yet, what else was there? Meantime, she found nothing better to do than to put her arm, with gentle resoluteness, round Melissa's neck and draw the girl towards her, and quietly press her little nervous hand in token of friendship and sympathy. Melissa at all events made no resistance now. Geraldine began to hope that she would soon return the pressure of sympathy.

A knock at the door made the girls start. A servant brought a card for Miss Aquitaine.

"Do please read the name ; can't you read the name ?" Melissa asked in a tone of petulance.

Geraldine took the card. "Clement Hope," she said.

"Oh, I can't see him ; I won't see him. Pray send him away. Tell him to call again to-morrow ; next week ; next year."

"Who is he ? A friend of your father ?"

"Oh, yes ;—wait outside, Jane ; I'll call you in a moment. Oh, yes. My father delights in him ; adores him ; my father likes everybody. He is a dreadful man—not my father, but Clement Hope ; a dreadful boy ; a silly, sickening goose. He takes it into his ridiculous head, I believe, to fall in love with me—at least, I believe he does—and I hate him."

"You seem to hate us all, dear, don't you ?" Geraldine said with a smile.

Melissa positively smiled in return. The very absurdity which she saw in the visit of her hapless lover seemed to rouse her into better spirits.

"I don't think I hate you now so much as I did ; and, anyhow, I know you are just the sort of good girl to get me out of this scrape. How could I go and see him ? Look at my eyes ; look at my cheeks ; how could I see any one ? Will you see him, Miss Rowan ? I'll call you Geraldine if you will go and see him and send him away. Tell him to call to-morrow ; papa wouldn't like it if we simply turned him away. Say I'm not well, and I'm *not* well ; get rid of him for to-day. I needn't ask you to be kind to him, for you are kind to every one ; it's your way ; you like it ; I don't. But he's a nice boy, people say, if he were not such a fool ; and I suppose, after all, he isn't much more of a fool than other creatures."

"I don't see any particular evidence of folly in what you say of him," Geraldine said with a kindly smile. "I am not at all surprised ; I can imagine a very wise boy falling in love with you."

"Can you, really ? That's very nice of you to say, anyhow. But he is such a nuisance all the same, and I won't have it," Melissa declared with renewed energy.

"I'll go and see him with pleasure," Miss Rowan said. "When may he come ?" For she fancied that, somehow, Melissa did not really want to have him dismissed once for all.

"I would much rather he never came, but papa wouldn't stand that, I am afraid, even from me. Let him come to-morrow at five. There will be other people here then, and he can't talk to me. He

can talk to you. I dare say you will discover all sorts of great and good qualities in him. I declare I think he is just such another good person as you are—good-natured and sweet ; and not malicious and bad-tempered, and all that, like some who shall be nameless.”

Miss Rowan went at once to see the fond youth whom Melissa would not favour. Clement turned round with deepened colour and sparkling eyes when he heard the rustle of a woman’s dress. Even Miss Rowan, for all her short sight, could not fail to see the shade of disappointment which came over his face as he looked upon a strange young woman and not Melissa. Geraldine’s heart was touched by his expression. He looked very handsome and winning, she thought, and worthy of all compassion. It came over her mind that if she could have a brother, she could wish to have one like him.

“Miss Aquitaine begs you will excuse her,” she said ; “she is not quite well to-day, and cannot see any one. But she hopes you will call to-morrow about five.”

“Miss Marion, I presume ?” Clement said.

“No, not Miss Marion ; Miss Rowan, a friend of Captain Marion’s—and of Miss Aquitaine, too.”

“She will see me to-morrow ?” Clement asked.

“She will see you to-morrow ; yes, certainly. She is not seriously unwell, but she is not well enough to see any one to-day. But she will see you to-morrow ; I can promise you that.”

She smiled, and held out her hand to him as he was taking his leave. Their eyes met ; and Clement knew, both by her look and by the touch of her hand, that she somehow had his secret and felt sympathy with him.

CHAPTER IX.

ON TOWER HILL.

CLEMENT HOPE had come apparently on a fool’s errand. From the moment of his leaving Mr. Aquitaine the day before, he had been filled with a wild desire to take the father at his word and go straight away and propose for the daughter. He could not possibly have explained why this insane impulse took possession of him ; but it seized him in a moment, and could not be shaken off.

“Anyhow, it will end the matter,” he thought, and he felt a sort of wild and bitter desire that his repulse might be all as painful as Mr. Aquitaine had led him to expect. Let the knife be applied to

the diseased part of his frame ; let the cautery burn out the idle passion which consumed him. The sooner the better. So he paid his visit, and only saw Geraldine. Next day he came again, promptly at five, and sent up his card to Miss Aquitaine.

He was shown into a waiting-room, and he remained there what seemed to him an unending time. His pulses throbbed, and there was a singing in his ears, and he saw objects flickering before him. He sat down ; he stood up ; he tried to walk up and down the room. His agony was intense. A door opened at last, and a servant came and told him Miss Aquitaine wished him to come upstairs. He followed, feeling more and more alarmed and confused as he approached nearer to the sacred presence.

Clement had expected anything rather than the kind of anticlimax which awaited him. He had made up his mind that somehow he was to be alone with Miss Aquitaine, and now he was shown into a room in which his uncertain eyes could only at first make out that there were several persons. The room was dark with curtains and draperies, and closed *jalousies*, and lowered blinds, to keep out the rays of the sun ; and Clement could for a while hardly discover whether its occupants were people he knew or not. He stood hesitating on the threshold, and apparently looking for Miss Aquitaine, who did not seem in the least degree concerned to relieve his anxiety. His card had been just the card of the ordinary visitor, and it contained certainly no mysterious impress about it to forebode of a wild young lover and an absurd proposal ; and yet poor Clement had, in a vague way, taken it for granted that if he was to be seen at all by Miss Aquitaine, he was to be seen alone, and to have an opportunity of making his declaration and receiving sentence of banishment. Now he came into an ordinary drawing-room, with four or five persons, no doubt of the most commonplace kind, shutting off his cold-hearted true-love from his sight. He advanced into the room, however, as composedly as he could, and he actually succeeded in seeing Miss Aquitaine. She was seated on an ottoman, her profile turned to him ; she was talking to a lady, and apparently not thinking about him in the least. He had to go up and call her attention, in the most unheroic and commonplace manner, with the vapid words, "How do you do, Miss Aquitaine?"

The moment he had said these words he felt that a declaration of love would, under any circumstances, be impossible for that time.

Miss Aquitaine looked round very composedly, and answered his question by putting the same question to him, with apparently little interest in any answer.

"How do you do, Mr. Hope?"

"I did not know you were in town until the other day."

"No?" said she. "We have not been long here."

"I hope you are enjoying yourself," he remarked.

"Yes," she replied, "we have been enjoying ourselves;" in a manner which, whether she meant it or not, almost seemed to imply that at that precise moment she was not enjoying herself.

"I saw Mr. Aquitaine the day before yesterday," murmured the forlorn youth.

"Indeed?" said the damsel; "he has gone home again."

This was dreadful. It was impossible for any lover to get on well after such a fashion as this. Besides, he had paid his compliments to the young lady, he had said his say, and there really seemed nothing for him now but either to fall back and talk to somebody else, or make his escape out of the room as soon as he decently could, and never come back any more. He tried to say another word or two to Melissa, but received neither assistance nor countenance from the young lady, who was now not looking at him at all. He felt himself constrained to fall back. He looked round for somebody else to speak to. There were two or three ladies and one or two gentlemen. He was about wildly to address one of the men who was nearest, and remark to him that it was a fine day, when he was suddenly saved from his embarrassment by the friendly voice of one of the ladies.

"I am glad to see you again, Mr. Hope. I suppose you are a Londoner; now you can tell me something I want to know about London. We all happen to be strangers here."

He looked in the face of the lady—the lady?—no; the beneficent and redeeming angel who had thus rescued him from utter confusion, had taken him by the hand and drawn him within the circle of living humanity. She was tall and dark, and, as he thought, strikingly handsome. One of the faces he most admired in art was the face of the ascending Madonna in that immortal picture of Titian's which stands in the great gallery by the Venetian canal. To his somewhat bewildered eyes it now seemed as though the face and the kindly expression of the girl talking to him were almost as beautiful and delightful as the Madonna of his æsthetic dreams.

Then in an instant he saw that it was the girl who had spoken so kindly to him the day before, and had pledged herself to procure him that interview which now seemed so hopeful and satisfactory; and he felt that she was asking him about London only to relieve him from an embarrassment which she could well understand

and feel for. Clement hastened to say that he knew all about London, and could guide anybody everywhere. It turned out that, among other things, Miss Rowan particularly wanted to walk round the Tower of London ; to see and study Tower Hill ; and she wanted some one to go with her and tell her all about it, and let her linger on any particular spot ; some one who was not a professional guide. Miss Marion wanted to go too, and even Melissa would go ; but Captain Marion hated old places, especially places down among dingy, narrow streets ; and other gentlemen had no particular knowledge of the Tower, and had only a dim recollection of having seen it long ago on the same day as the Thames Tunnel. Geraldine positively declined to go with any one who regarded the Tower from that point of view. Clement would have been delighted at that moment to act the part of one of the professional guardians of the Tower, beefeater costume and all, if it could have relieved him of the sense of being in everybody's way, and a subject of derision to himself and all the earth.

So it was arranged that next day Clement was to " personally conduct " a select party to Tower Hill, and that the select party were to walk all the way, and to be shown Eastcheap as they went along, in memory of the wild Prince, and Poins, and Jack Falstaff.

It was a dull and grey afternoon when they reached the Tower. The day had been a very unusual one for summer ; not, indeed, unusual because it had been raining heavily in the forenoon, but because there was something more of late winter or early spring than of summer in the atmosphere, and even in the soft rain. When the rain ceased the sky was still heavily hung with grey clouds, and what glimpses could be seen between the dim masses were themselves only a faint and more delicate grey, with streaks of silvery sunlight slanting across. Fancy herself might have been inclined to fail before the prospect of a muddy walk round the Tower, but the young ladies who had resolved on the expedition were not so easily to be discouraged. Miss Rowan had lived in a country where you must make up your mind to go out occasionally in rain and snow, and to tramp over very muddy roads, or else resolve to house yourself and hibernate during all the months between late November and early March. To her, therefore, it seemed nothing to encounter the soft mud of Tower Hill and the possibility of another descent of the rain-showers. The Tower looked picturesque, old, and dreamlike under the heavy sky, of which itself was only, it might seem, a softer shade. With its moat, its trees, its old walls, and its round-topped turrets and ancient weathercocks, it looked like a building that

might have been moulded out of the clouds themselves, so entirely in harmony was it with the prevailing atmosphere. It was the London of an older time symbolised and made living in stone and mortar. Miss Rowan, like most enthusiastic girls who have been born in America or who have lived there, was full of interest in every memorial of London in its olden days, in every place which had an association attached to it, which brought her back to history, or poetry, or romance. As she looked at the Tower under that peculiar atmosphere, it seemed to her to be worthy a question whether the world has anywhere a pile of buildings more interesting and better fitted to speak to all the feelings. The river could be seen here and there ; and, as the sun slanted across it at one part, it seemed for the moment transfigured into such a silver stream as it might have been even there in the times when Chaucer did the customs' duties on its bank.

The select party walked round the landward sides of the Tower gardens, doing nothing else but observing from all external points of view, and commenting on the manner in which each new position from which they looked brought out this or that picturesque or historical attribute. Clement was keenly interested in the Tower, but probably still more interested in the task of pointing out all its peculiarities and beauties to his companions. They became free in a moment from all the meaner associations of the place. They thought nothing of the Minories or of Lower Thames Street, or of the cabstand on Tower Hill itself, or of the guides who importuned them as they passed the principal entrance with the request that they would inspect the Tower inside and see all the wonders. They were really absorbed in contemplation—in admiration of the Tower as it stands; not as a curiosity shop, but as a great historical building, made picturesque by its site and by its memories, even more, perhaps, than its material structure. But it would be rather too much to say that all the little party of four were equally interested. Melissa was neither interested nor pretended to be. She had come there simply because, little as she cared for the sight, she still less liked to be left at home by herself. She had told her companions that she only came because she did not choose to be left alone, and because, if anything was to be seen, she was not going to be what she called "out of the swim." But she cared not much for the historical associations of the Tower. She cared, perhaps, still less for its appearance. She thought the moat a dreary, dirty old place; and her chief impression of the enterprise was that it was very monotonous walking round rusty old railings, and that the mud was

particularly sticky, and very distressing when one had thin and pretty shoes and stockings. Yet it was destined that the expedition should prove to be of more interest to her than to any other of the party. As they were preparing to make another round of the railings, despite Melissa's sad little protest and her eager demand to know whether they had not seen enough of the old thing yet, they saw a tall man crossing Tower Hill who looked at them, and then made straight for them in so direct a way that it was clear he was about to claim acquaintance. There was no mistaking the man when he came a little nearer. Melissa forgot for the moment the Tower, the misty atmosphere, her personal fatigue, her hatred of historical buildings, the mud sticking to her shoes, and the chance of spoiling her stockings, when she saw that the new-comer was Mr. Montana.

Melissa was not the only one whose heart beat quickly when Mr. Montana came up and joined the party. Clement almost forgot for the moment the fact that his heart was broken by disappointed love in the surprise of keen interest which Montana's sudden appearance aroused in him. "Destiny—destiny itself," thought our young lover, "has brought me in his way just now. Here begins my rescue, my career."

Miss Marion did most of the talking on behalf of the select party. She explained the object of their visit to that region.

"I am here on different business," Montana said. "I am interested in an institution here—the Church of Free Souls. Let me walk with you for a little."

They could not walk all five abreast round the Tower. Clement could not venture to fall back with Melissa; he knew she did not want him. Geraldine was determined that she would not walk alone with Montana, and she resolutely kept with Sydney; besides, Miss Marion and she were interested in the Tower, and wanted to have their attention directed to any new point which might have fresh interest. Clearly it was the duty of our young friend, since the party could not all walk together, to walk with the two young ladies who made his company welcome, and to whom he might be of positive assistance. He had come out as a guide, and they alone wanted to be guided. Naturally, therefore, Melissa fell behind; and as she fell behind Mr. Montana walked with her. She had never before exchanged more than the most formal words of conversation with him. She sometimes fancied that he regarded her merely as a little girl, with whom it was not necessary for a great man like him, occupied in a lofty mission, to exchange anything more than an occasional

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"No, I don't think they do," said Melissa, afraid to say much more lest it should plainly appear that she herself did not quite know what the summons was. But she felt more deeply impressed than ever with Montana's words. If he had gone deliberately about to make himself attractive to Melissa, he could not have taken any step more aptly fitted for the purpose than this way of at once addressing her as if she were a grave and responsible being, interested like him in the problems of life. Montana was not really thinking about Melissa. He was only, after his fashion, finding vague imposing sentences to express some general idea. If he had been desirous to captivate the little girl, it is not impossible that he might have gone about it in the usual way, by addressing to her some graceful compliments and conveying with his eyes the impression that he admired her. That would have been powerless indeed, compared with the course he unconsciously took. He had lifted, as it seemed, poor little Melissa into his own atmosphere, into sympathy with him. She stood on the same plane with him; and, metaphorically at least, they were hand in hand. To her it seemed as if for the moment they two were alone.

(To be continued.)

A HOLY MISSION.

AMONG those exiles who during the turbulent days of the Reformation found a home in the Eternal City, none occupied a more conspicuous position than Reginald Pole. On his father's side descended from Cadwallader, the last of the British kings, there ran in his veins the proud blood of the Plantagenets from his mother, the ill-fated Margaret, Countess of Salisbury, the daughter of George, Duke of Clarence ; thus by birth he was one of the most illustrious of the English subjects of his time. From his youth he had been a severe student, with the intellectual tastes of his class ; and there had proceeded from his pen works which had made his name honoured amongst the men of letters on the Continent. In a dissolute age, scandal could find no fault in him ; destined for the Church, his life was pure, and had been throughout consistent with the sacred calling to which he was to belong. Educated at Oxford, and afterwards at Padua, he had thrown his whole soul into the cause not so much of Catholicism as of the Papacy. He was broad and tolerant in interpreting certain of the doctrines of the Church of Rome—indeed, he had even been accused of heresy—but he permitted no discussion as to the position and authority of the Pope. He was a Papist first and a Catholic afterwards. Sovereigns who adhered to the creed of Rome, but refused to admit the authority of the Vicegerent of Christ within their dominions, were deemed by him as outside the pale of the faith, and fit only for the curses of excommunication.

As an Ultramontane and an Englishman, Reginald Pole had specially interested himself in the affairs of his country. To the Reformation he had no reason to be grateful. He had opposed the divorce of Henry the Eighth, had written a bitter treatise against it, and had been branded as a traitor, and a price set upon his head. His mother and brother had been imprisoned in the Tower, and had ended their days on the scaffold. He saw England, the country of his birth, declaring, through her Convocation and her Parliament, that a Catholic king, within his own dominions, was independent of the Papal power, and supreme over all causes and persons ecclesiastical and civil. His cherished tenet had been discarded by his countrymen, and

the consequences that such repudiation entailed had not been slow to assert themselves. He saw England placed under the ban of excommunication, and the Catholic religion cast down from its lofty pre-eminence ; for Englishmen refused to profess a creed which forced them to acknowledge as Head of the Church a vindictive and brutal sensualist. He saw Protestantism and Atheism walking hand in hand over the ruins of the one true faith ; he saw the monasteries and nunneries emptied of their inmates, and their wealth and lands seized by the state ; he saw the poor wandering about, ignorant where to turn for relief, not knowing what to believe, and ending by swelling the ranks of the seditious and disaffected. On all sides plunder, debauchery, and treachery were laying low proud England, and making her a byword and reproach wherever her name was mentioned. "The shadows cast by the Reformation are already darkening the land," exclaimed the enthusiastic Ultramontane.

So thought Pole, as he lived amongst his Italian friends and discussed the future of his country. His devotion to the cause of the Papacy had not gone unrewarded. He had been raised to the dignity of a cardinal ; he had been employed on various important political missions ; he had played an important part at councils and theological meetings ; he had even been a candidate for the tiara. Yet, though for years he had never seen the shores of his country ; though his friends were Italian cardinals and prelates ; though he held office under a foreign power—he never forgot that he was an Englishman, and that the land of his birth had the first claim upon his devotion and sympathy. "There is not a better English heart," wrote Sir John Masone, our ambassador at Brussels, to Queen Mary shortly after her accession,¹ "within the realm than Cardinal Pole's ; and if things were as he wishes, Her Majesty would govern in a blessed estate. He always praises ripe, temperate, and modest proceedings. I wish to God the whole realm knew him as the Bishop of Norwich and I do, and had that opinion of him as in effect all states of Christendom have." As the prayer of St. Paul was that all Israel might be saved, so the chief petition in all Pole's devotions was that excommunicated England might be restored to the unity of the Roman Church and repent her of her past transgressions. The one fixed object of his life was, that through his instrumentality this union might be effected. He kept himself in constant communication with the leaders of the English Catholic party, he embraced every opportunity of stemming the tide of English Protestantism, and he showed by his polemical treatises, his sermons, and his prayers,

¹ *State Papers, Foreign*, May 5, 1554 ; ed. by W. B. Turnbull,

that he had, above all things, the spiritual welfare of his country sincerely at heart.

At the accession of Edward the Sixth the hopes of the Cardinal had run high. The King was young, his opinions were not formed, he was free from the prejudices of his father—why should he not return to the fold and stamp out the heresy from his kingdom before it had taken fixed root? The Cardinal wrote to the Privy Council. He had suffered much, he said, during the last reign, but he bore no malice ; he forgot and forgave the past. The Supreme Pontiff had always looked upon England with a fatherly eye, and to prove this affection his Holiness was now willing to send a legate with full powers to reconcile Edward VI. to Rome. Willingly would he, said Pole, if wished, accept the holy office. No notice was, however, taken by the members of the Council of this letter ; but so hostile were they to its contents, that the bearer of it had to fly for his life. Nothing discouraged, Pole now wrote to the young King ; but with no better success. Edward had been educated in hatred of that Church which had excommunicated his father, and was staunchly in favour of the new religion ; the rejection of the Papal authority suited the stout feelings of English independence ; whilst the lords and gentry who had been enriched by the spoliation of the monasteries had no intention of re-establishing the old religion, and thus being compelled to disgorge their illicit wealth. It was evident to Pole that it was now idle to force measures ; he must bide his time and study a more favourable opportunity. The young King was sickly, and it might be that within a few years, before he had time or health to provide a successor to the throne, he would quit the world and leave the kingdom to his sister Mary, whose devotion to the Holy See none could doubt. The Cardinal withdrew himself from public affairs and retired to the convent of Magguzzano, on the banks of the Lago di Guarda. Here for the next few years he studied, wrote, and said masses for the conversion of heretic England, only varying his seclusion by occasional visits to his friend Julius the Third, who then wore the tiara.

Then the event occurred for which Pole had so long hoped. Edward the Sixth, who soon after his accession had given his subjects no expectations of a long reign, had, after a lingering illness, been gathered to his fathers. Mary, though hindered for a time by the intrigues of Northumberland in favour of Lady Jane Grey, claimed the crown, and was welcomed by the people. When the news of the accession of his cousin reached Pole in the solitude of his monastery, his joy was unbounded. At last the dream of his life was to be realised ! England was to return to the faith of her ancestors, and the

blessing of the Holy Father was once more to illumine the land ; the cold maimed rites of Protestantism were to give way to the splendid ceremonial of the one true Church ; processions, with their banners, incense, and white-robed priests, were again to walk the streets with the Host held on high for adoration : monasteries and nunneries once more were to spring up from the ruins that now strewed the ground ; the poor would now know where to seek for shelter and relief ; the priests were to be really the ordained servants of the altar, and no self-elected intruders ; England was again to be Catholic and Popish ! The enthusiastic Cardinal already saw himself the ambassador of Rome, blessing his countrymen and receiving their homage.

He at once penned an epistle to the Pope informing him of the good news. "I cannot delay congratulating your Holiness," he wrote ;¹ "the nature of the event appearing to me such, that since many years nothing has occurred in Christendom on which one could more reasonably congratulate any Christian mind, and especially that of your Holiness, this being a manifest victory of God over the long-cogitated malice of man corroborated by such great forces and means for the attainment of his perverse ends. And God of His goodness, to render His proceedings more illustrious, has chosen to annihilate in one moment all these long-cherished projects by means of a woman, who for so many years has suffered contrary to all justice, being in a state of oppression shortly before this took place, and who is now victorious and called to the throne ; thus affording reasonable hopes that together with her there will be called to reign in that island justice, piety, and the true religion, which have hitherto been utterly crushed, and that the kingdom will return to its obedience in like manner as its alienation was the commencement and cause of its utter ruin." Pole was summoned to Rome. His birth, his devotion to the cause of Katherine of Aragon, his talents, his loyalty to the Holy See, all pointed him out as the one man to watch over the spiritual interests of England. He was appointed Legate from the Apostolic See, with full powers to effect a reconciliation between Rome and the heretic island. He wrote to Mary. He blessed the "right hand of the Lord" for having placed so faithful a daughter of the Church upon the throne. Her accession without bloodshed only proved how powerfully she was protected by the Almighty, and how the Holy Spirit had willed that the malice of her enemies should be defeated. Therefore, having received such especial favour from the Divine goodness, she was more

¹ *State Papers relating to English affairs existing in the Archives of Venice.* Edited by Rawdon Brown. August 7, 1553. The letters of Pole in these volumes are of great importance.

than ordinarily bound, he said, to see that her kingdom returned to its former obedience to the Apostolic See, and that the true religion of the Apostolic Church were fully restored. For in this point of obedience to the Church, warned Pole, consisted the establishment of her crown and the entire welfare of her kingdom. He then informed her that he had been appointed Legate, to congratulate her "on the victory of God in this cause." He had always been conscious, he wrote, of "her gratitude towards God and the internal affection of her heart for obedience to the Divine laws and institutions, including the obedience to the Apostolic See which Her Highness, above all others, is bound to favour, as for no other cause did the King her father renounce it, than because the Roman Pontiff persevered in favouring her cause and would never consent to his strange and iniquitous desire." He concluded by wishing to hear from her "the time and mode which she would wish him to observe in performing the embassy to her from the Vicar of the Lord, for her own comfort and the benefit of the realm."¹

A few days later he wrote to her again on the subject, stating especially how anxious he was to see the Queen "render the title of the primacy of the Church on earth to whom the Supreme Head both of heaven and earth has given it. . . . Of how great importance and moment this is, both for England and the Church of God, your Majesty, without the perusal of books which treat this matter, may read, I say, in the much clearer testimony of the blood of those who you knew were considered the first in the kingdom for their fame of true doctrine and religion."² His anxiety that England before all things should swear fealty to the Pope, and remove the scandal of a woman having to sign herself as "Head of the Church," was grievous in the extreme. Stephen Gardiner, the Bishop of Winchester, had been released from his prison in the Tower, and was now on the Council. Pole wrote to him to advise the Queen aright in this momentous matter. No greater opportunity, hinted the Cardinal, could be offered the liberated prelate for serving his God and his country, than for him now to use all his energies to restore to the Roman Church her just title of supremacy, and to do so regardless of any worldly consideration. Until His Holiness was considered as Head of the Church in England all else was idle.³ Yet it was not until early in the year 1555 that Pole's prayer was answered and the Act of the Royal Supremacy repealed.

The truth was, that, desirous as Mary proved herself to be to

¹ *State Papers relating to English affairs existing in the Archives of Venice.* August 13, 1553.

² *Ibid.* August 27, 1553.

³ *Ibid.* August 28, 1553.

restore wholly and fully the Catholic faith, she was now completely in the hands of her advisers, and had to act with much caution. She ruled a people who were divided in their sympathies ; who were divided between Protestantism and Catholicism, between the daughter of Katherine of Aragon and the daughter of Anne Boleyn. It was true that Mary was on the throne, but her position was insecure, and she was surrounded by enemies. To offend her subjects at the very outset of her reign by any act which would arouse their national or religious prejudices would be most injudicious. She was therefore counselled to proceed warily, and at this time she was in a mood to accept advice.

Meanwhile Pole had quitted his retreat on the banks of the Lago di Guarda, and was on his way to his destination. "If the moment has not yet come," he wrote to one of his Italian friends,¹ "for me to go straight to England, yet is the time mature for me to be in the neighbourhood, to enable me to assist the Queen's good intention." His first resting-place was at Trent, where he was received "most lovingly and with every sort of courtesy." Here a letter awaited him from Mary. It was addressed to her "good cousin and most blessed Father in Christ." The Queen expressed her thanks to the Cardinal for the counsel contained in his letters : "For which advice," she wrote,² "even were you not joined to me by nature as you are, I would nevertheless be bound to return you most cordial acknowledgments, assuring you that—through the assistance of the grace of God, to whom I feel very much bound to render the most humble thanks for this—I never was, and hope of His mercy I never shall be, opposed to your good and spiritual exhortation as contained in your letters." Yet Mary hinted there were difficulties in the way of following the Cardinal's advice. Most desirous was she to show her obedience and due devotion towards the Church of Christ and her spiritual mother the Catholic and Apostolic Church ; still was she unable at present, by any fitting means, to manifest the whole intent of her heart in this matter. "But so soon," she continued, "as it shall be in my power, by any suitable and possible mode, to declare to the world my due and sincere intention, I will not fail in announcing this to my good cousin." Having full trust in the miraculous mercy of God, she felt sure, she said, that the present Parliament would abolish "all those statutes which have been the cause of all England's afflictions ;" and when that time arrived, she would then apply to the Pope for a general

¹ *State Papers relating to English affairs existing in the Archives of Venice.* September 8, 1553.

² *Ibid.* October 8, 1553.

pardon. She concluded by praying Pole to beg His Holiness to continue his multiplied goodness towards her, and ever to prove her friend.

From Trent the Cardinal proceeded on his way towards Augs-burg ; and on nearing that town, was induced by its bishop to stay at the monastery of Dillingen, on the banks of the Danube. Here he remained a few days ; but anxious to have an interview with the Emperor, Charles the Fifth, the cousin of Mary, who, he heard, was then at Brussels, he started off somewhat hurriedly to Flanders. He had not travelled many miles, when he was met by Don Juan de Mendoza, the Imperial Minister, accompanied by a splendid retinue. The Emperor had several reasons why it was inexpedient for Pole to visit England at the present time. The Spanish match was under discussion, and Charles was most anxious that the English people should not be unnecessarily irritated until the marriage had taken place. The question of the revival of the Catholic religion had caused the position of the Princess Elizabeth to become very formidable. Mary was not popular. The people, hating the Spaniards and the authority of the Pope, were ready at the slightest provocation to break out into revolt. The arrival of Pole in the capacity of legate, whilst this feeling was uppermost, could only result in evil—the marriage between Philip and Mary would be broken off by the angry English, and the nation strengthened in its atheism and its Protestantism. Such were the reasons which the imperial ambassador at the court of Mary had given to his master for the deferring of Pole's mission, and Charles determined to act upon them. The Emperor cared very little whether England was Catholic or not ; but he cared very much whether she was to be his ally or the opposite in his war against France. Mendoza was therefore at once despatched to stay the progress of the Cardinal. The envoy greeted Pole with every homage that courtesy could inspire, and then delivered his orders. It was the wish both of the Emperor and of the Queen of England, he said, that the legate should not proceed farther on his journey. The time was not meet either to propound proposals of peace between the Empire and France, or to assert the authority of the Papacy in England. Important matters had to be first settled before the mission of his Grace could be entered upon. The Spanish marriage must have taken place, and England assured, before she did homage to the Holy See, that the Pope would not interfere with the secularisation of Church property. At present the opportunity was not fitting, and it was the request of his Imperial Majesty that the legate should return to Dillingen until the hour was more pro-

pitious for the object his grace had at heart. With these views Pole far from agreed; aware, however, that without the assistance of the Emperor his mission would be futile, he felt he had no alternative but to retrace his steps to the convent, and await the "fitting opportunity."¹

Still, he had no intention of tamely submitting to this rebuff. He was an Englishman, and he believed he knew better than any foreign potentate what was the best course to pursue to gain the hearts of his countrymen. Full of zeal, intent upon one end, and listening only to the opinions of the English Catholics, he felt assured that he had but to land at Dover and hold on high his legate's cross for the people to flock around him and repudiate their heresy. He believed that England was still the England of the days when he was an undergraduate at Magdalen and preparing for the Church. He was ignorant of the liberalism that during the interval of his exile had impregnated all classes, making the power and pretensions of the Papacy to stink in the nostrils of Protestant and infidel England. His pen was always his great solace, and now he wrote to the Emperor. The more he considered this stoppage, he said, the less did it seem to him in accordance with the honour of the Apostolic See and with the obligation of Queen Mary to God and to her own advantage. To delay the obedience of England to the Church was most unwise. The principal foundation of Mary's right to the crown rested on the legitimacy of her mother's marriage, which depended on the Papal dispensation. Hence, by abrogating the authority of the Pope, the right of the Queen to the English throne was in like manner abrogated, and by deferring the establishment of the Papal authority the establishment of Mary's right of succession was also deferred. It therefore seemed that the "maturity of the time" depended entirely on the arrival of the Papal legate in England to confirm the Queen's claim to the crown. He therefore begged his Imperial Majesty to find means for speedily removing any impediment to this journey, so that he, Pole, might come to Brussels forthwith to fulfil his legatine office "for the preservation of peace and the unity of the Church, to the honour of God, the general benefit of Christendom, the personal advantage of the Queen of England, and the increase of the honour of the Emperor."²

To Mary he wrote in a more imperative strain. It ill became her, he lectured, to dissemble this cause of the union and obedience of the Church and to hide the light that Christ had given her

¹ *State Papers relating to English affairs existing in the Archives of Venice* Pole to the Pope. October 27, 1553.

² *Ibid.* October 28, 1553.

to illumine the whole kingdom under a bushel for dread of turmoil. He who had so miraculously assisted her in the past would assuredly assist her in the future. England had thrown herself overboard from St. Peter's ship; but God and the Apostolic See had shown her the mode of escaping from the waves by re-entering the vessel. Those who remained out of the ark and were overwhelmed by the flood at the time of the Deluge never, he warned, incurred greater danger than those whose souls were now flooded by increasing cupidity and depraved opinions. Nor must her Majesty suppose herself in less danger because in her mind she had never departed from the ark or from her obedience to the Church, though she had consorted with those who plunged overboard. Before her accession such an excuse might have been accepted, but the accusation now became all the graver since, being saved herself, she ought to save others, just as the pilot of a ship put his hand at once to the helm, but if he delayed, hesitated, and consulted in the mean while, the crew would perish. Her Majesty had received from God the spirit of counsel; let her be guided by it, and not by the mere instincts of nature. It was of far more importance for her kingdom to become the spouse of the Church than for herself to be united to the most powerful potentate. He hoped to hear from her that he was to proceed on his way.¹

This letter had the desired result. Mary wrote to the Bishop of Norwich, her ambassador at Brussels, commissioning him to receive the legate and to introduce him to the Emperor. She also requested him to deliver a message in her name to Pole to the effect that she hoped in the Divine goodness soon to see the Cardinal in his native land, when she should be able more freely and fully to unbosom herself to him, and that his coming would give her very good comfort.² A few days later the legate received a letter from the Emperor inviting him to Brussels, saying that "the sooner he went thither the better would his Majesty be pleased." On the receipt of this grateful intelligence Pole immediately set out on his travels. As he approached Brussels he was met by the Duke of Savoy and a vast retinue of the Flemish nobility and clergy, and conducted to his quarters within the town. The following day he had a long interview with the Emperor, but the result of the conversation was not satisfactory. The Empire was not averse to peace with France, explained Charles, but it was not content with the terms that had hitherto been proposed, "provided means be found," said he, "for making a peace fair and durable. I never intend

¹ *State Papers relating to English affairs existing in the Archives of Venice.* December 1, 1553.

² *Ibid.* January 23, 1554.

to exclude the negotiations." And, as regarded England, Pole now saw for himself, without the convincing arguments of the Emperor, that the hour had not yet come for him to cross the narrow seas and absolve the heretic. The people had risen against the Spanish match; Wyatt, with his disaffected troops, was marching upon London; Mary was in supreme danger. For weeks Pole scanned the news with the keenest anxiety; then, to his joy, he saw that all occasion for fear was over, and that the Queen was more solidly established on the throne than ever. Wyatt had failed; sentence of death was freely passed upon the rebels; opposition had been silenced.

And now the great desire of the heart of Mary was to be accomplished. Philip, to whom she had been united by proxy some weeks before, landed at Dover, and his love-sick wife was folded in his cold and mercenary embraces. The legate, watching the turn of events from his lodgings at Brussels, wrote to the husband congratulating him and wishing him all prosperity. He had, he said,¹ a double claim to be heard, being legate from the Pope for the purpose of reconciling England to the Church, and of establishing peace between the Empire and France. This union between England and Spain encouraged him to hope for the best. The Queen, to whom the crown belonged by hereditary right, had always looked with a favourable eye upon His Majesty, admiring his endowments and prerogatives, but especially his inherited title of "Catholic." And she had now summoned him to be joined in the most holy bond of matrimony for the defence and maintenance of that Catholic faith which had been so harassed in England. At the same time, the Cardinal wrote to Mary reminding her that her kingdom was as yet outside the pale of the Church, and that she should not rest till England had made her peace with the Holy See. He was there to receive her and her subjects, let them not turn a deaf ear to the divine summons.

Still, months sped on, and no humble request was despatched to Brussels to bid the legate cross the sea and accept the penitent submission of the wanderers from the fold. No messenger knocked at his door, no letter came addressed to him. Pole was mortified and was waxing impatient. If Mary were sincere in her wishes, no obstacle now stood in her way. Her throne was safe, her kingdom settled, the Spanish match consummated; no State reasons could be alleged why it was advisable to delay any longer reconciliation with Rome. Pole again took up his pen and wrote to Philip. It was now a year since, he complained,² that he commenced knocking at Philip's gate, but as

¹ *State Papers relating to English affairs existing in the Archives of Venice.* July 11, 1554.

² *Ibid.* September 21, 1554.

yet no one had opened its doors to him. Were the king to ask, "Who knocks?" he would receive the reply, "I am he who, in order not to exclude your consort from the palace of England, endured expulsion from home and country and twenty years of exile." Were he only to say this, did it not make him seem worthy to return to his country and have access to the king? But since he was not acting in his own name, nor as a private person, he knocked and demanded in the name and person of the Vicegerent of the King of Kings and the Pastor of men, namely, the successor of Peter, or rather Peter himself, whose authority, heretofore so flourishing and vigorous in England, was now ignored and rejected. We know, he said, how Mary welcomed the apostle released by an angel from his prison when he knocked at the door, but could the same be said of Mary the Queen? Was it fear or joy that forbade her to open the door, above all, now that she had heard the voice of Peter, and knew for certain that he had been long knocking? Well did he know that the Queen rejoiced—but she also feared; had she not feared, she would not have so long delayed. If she rejoiced in Peter's release, if she acknowledged the miracle of her accession, what prevented her from giving him admittance when he came to the gate, and returning due thanks to God, especially now that Herod was dead and she had inherited his whole empire? The Cardinal therefore wrote to Philip, "a most religious prince," to remove the fears of his consort and to lead her in the right path. Other ambassadors, said Pole reproachfully, have had the door opened to them, while alone to the legate it had remained closed. It was for King Philip to consider whether, being a Catholic prince and one who had inherited the title of "Defender of the Faith," it became him to receive all foreign ministers who approached him to offer congratulations, whilst the legate of St. Peter's successor—that legate, too, who had been sent to confirm his Majesty on his throne—was denied admission. Might it not be feared lest Christ took offence at the immediate reception of the ambassadors of all other princes, whilst His own ambassador remained waiting without? The reception of Christ's legate should have taken precedence of all; as in every building the foundation stone was entitled to the first place. The kingdom could not be secure unless based on obedience to the Church, which, when abolished, discord at once arose and the prosperity of the realm vanished. Therefore it was imperative upon his Majesty to receive forthwith him who had been sent by God and His Vicar.

This letter brought matters to a crisis. If Pole were ever to land in England, the present moment was as opportune for the purpose

as any other. A messenger was accordingly despatched to Brussels to arrange certain details. The legate was to pledge himself not to interfere with such Church property as had been secularised in the last two reigns ; and as it was considered advisable that he should enter England, not as legate, but as a Prince of the Church and an Englishman, he was to comply with this decision. These points settled, Pole prepared for his journey.

Lord Paget and Sir Edward Hastings, the Master of the Horse, crossed the Channel to escort him to England. The envoys were charmed with the Cardinal. "Whensoever he shall be in England," they wrote to their Queen,¹ "believe that country shall fare the better for him, for he is the man of God, full of all godliness and virtue, ready to humble himself to all fashions that may do good." From Brussels to Calais his Eminence travelled by easy stages, "for his weak body," said Paget, "can make no great journeys, and his estate also is to be considered." At Calais he was received by the governor with every honour ; the bells rang, the men-of-war in the harbour fired salutes, and an enthusiastic crowd cheered his name and mission in front of his lodgings. The next day, the weather being propitious, Pole crossed over to Dover, and having rested the night, took horse, escorted by a powerful cavalcade of neighbouring gentry, to Canterbury. As the legate passed slowly along that undulating highway, trod by the feet of so many pilgrims, which leads to the famous cathedral town, not a hostile glance was levelled at him, not an irreverent remark was heard. Some looked on in silent curiosity ; others knelt in the roadway and bent their heads beneath the blessing hand ; from the throats of most of them rose the cry, "God save your Grace," for, cardinal or no, he came of the proud stock of the Plantagenets, and in those days Englishmen thought far from lightly of the names which were then historical in the land. From Canterbury Pole rode slowly on to Rochester, where he became the guest of Lord Cobham. At Gravesend was moored the legate's barge, splendid in its trappings, and with the silver cross, which he had now received permission to exhibit, conspicuous at its prow. He sailed down the Thames, the river being crowded with gaily dressed craft, and, after a voyage of three hours, landed at Whitehall Stairs, where he was received by Philip and Mary with every appearance of homage and affection. Lambeth Palace, now that Cranmer had been deposed, was assigned him as his quarters.

St. Andrew's Day had been fixed for the solemn ceremony of restoring backsliding England to the Apostolic fold. When the

¹ *State Papers, Foreign*, November 13, 1554 ; edited by W. B. Turnbull.

appointed time arrived the greatest excitement prevailed, and it was remarked that many of the lower classes who hung about Lambeth and the Palace gates were in tears. Those who spoke disparagingly of what was about to take place were in the minority, and but few dared to give open expression to adverse opinions. The tone of the people was reverent and charged with deep emotion. Parliament met in the early dusk of a November afternoon at Whitehall. On a raised dais sat the King and Queen under a canopy of cloth of gold, with the Cardinal on their right, his chair slightly in advance of the royal seat. Facing the distinguished three, crowding every inch of the great hall, were the nobles and the commons, with such spectators as had obtained permission to attend. When silence had been restored, Gardiner, then Lord Chancellor, at the bidding of their majesties, opened the proceedings. He read from a written paper, and his words were to the effect that England, represented by her Parliament, expressed her deep repentance for her past schism and disobedience, and implored the Apostolic See to receive her again into the bosom and unity of Christ's Church. The perusal finished, all eyes were fixed upon Pole. The moment that he had so long prayed for in his cell by the waters of the Lago di Guarda had at last arrived, the end for which he had defied sickness and fatigue had been attained, the goal of his ambition had been reached, and before him stood the once proud, rebellious England, penitent and submissive, begging grace for her misdeeds. His heart was full, and his voice trembled as he spoke a few prefatory words from his chair. England, he said, should indeed be grateful to the Almighty for bringing her to the unity of the Church and to the obedience of the See Apostolic. As in the days of the primitive Church she had been the first to be called from heathenism to Christianity, so now she was the first of Protestant peoples to whom grace had been granted to repent her of her past heresy. If heaven, he exclaimed, rejoiced over the conversion of one penitent sinner, how great must be the celestial joy over the conversion of an entire nation ! Then he rose from his seat and lifted his right hand.

The moment of reconciliation had arrived ; the whole audience fell on their knees and awaited in the stillest silence, broken only now and then by the smothered sob of an emotion that could not be controlled, the removal of the ban of excommunication. " Our Lord Jesus Christ," said the legate in tones that filled every corner of the chamber, " who has through His most precious blood redeemed and washed us from all our sins and iniquities, that He might purchase unto Himself a glorious spouse without spot or

wrinkle, whom the Father has appointed Head over all His Church ; He by His mercy absolves you, and We, by Apostolic authority given unto us by the Most Holy Lord Pope Julius the Third, His vicerent on earth, do absolve and deliver you and every of you, with this whole realm and the dominions thereof, from all heresy and schism and from all and every judgment, censure, and pain for that cause incurred. And We do restore you again into the unity of Our Mother the Holy Church, in the name of the Father, of the Son, and of the Holy Ghost." His words ended, there rose up, from the relieved yet awe-stricken congregation, "a spontaneous and repeated shout of Amen, amen."¹ Their majesties now made a move, followed by their subjects, to the Palace chapel, where the organ pealed forth the jubilant strains of the *Te Deum*.

Alone in his chamber at Lambeth, with a heart full of gratitude that the great object of his life had been permitted to be realised, Pole took up his pen to inform his master of the success of his "Holy Mission."² He described in detail the chief features of the ceremony. "It took place," he said, "in full Parliament, in the presence of the sovereigns, with such universal consent and applause, that when at the close I gave absolution by blessing the congregation, there was a spontaneous and repeated shout of 'Amen, amen.'" He bestowed exuberant praise upon Philip and Mary. Philip, though the husband and therefore the head of the spouse, yet treated his wife with such deference as to appear her son, "thus giving promise of the best result." As for Mary, "she has spiritually generated England before giving birth to that heir of whom there is very great hope." How grateful should we all be to God, to the Pope, and to the Emperor, he exclaimed, for concerting so holy a marriage !—"A marriage," he cried, his enthusiasm clouding his common sense, and causing him to degenerate into terrible blasphemy, "a marriage formed after the very pattern of that of Our Most High King, who, being Heir of the world, was sent down by His Father from His throne to be at once the Spouse and the Son of the Virgin Mary, and be made the Comforter and the Saviour of mankind. So in like manner the greatest of all the princes upon earth, the heir of his father's kingdom, departed from his own broad and happy realms, that he might come hither into this land of trouble, to be spouse and son of this virgin ; for, though husband he be, he so bears himself towards her as if he were her son, in order that he may reconcile this nation to Christ and

¹ *State Papers relating to English affairs existing in the Archives of Venice.*
Pole to the Pope. November 30, 1554.

² *Ibid.*

the Church." Could parallel be more revolting than the comparison of Philip, cruel and licentious, with the Redeemer of mankind !

England had sworn fealty to the Pope ; still, the object of the legate was twofold—to have the Papal supremacy acknowledged, and to stamp out the heresies that had sprung up in the English Church. A kind and amiable man in private life, Pole was severity itself where the favourite tenet of his creed was concerned. He would use all his persuasive powers to convert the heretic from his errors ; but if such a one persistently refused to turn towards the light, let him at once be put away and cast into outer darkness. In the memorable Marian persecutions Cardinal Pole took a leading part. His voice was ever in favour of mercy, provided there seemed a prospect of a recantation from the heretic ; but when no such hope was held out, no judge was sterner or more inflexible than the legate. Hard and intolerant as he was on these occasions, his conduct was but the logical result of a sincere belief in his creed. Outside the pale of the Catholic Church he thought there was no salvation ; to bring all within the fold was therefore the object of every true son of the Church ; those who created schism and disseminated heresies were guilty of the most awful of all crimes—the eternal destruction of immortal souls. To the man who destroyed the body the penalty of death was dealt out ; was he who damned the soul to be more mercifully treated ? In the eyes of Pole, a heretic was the greatest enemy of God and man. " For be you assured," said he, when lecturing the citizens of London upon their sympathy with the Protestant martyrs, " there is no kind of men so pernicious to the commonwealth as these heretics be ; there are no thieves, no murderers, no adulterers, nor no kind of treason to be compared to theirs, who, as it were, undermining the chief foundation of all commonwealths, which is religion, maketh an entry to all kinds of vices in the most heinous manner." The conduct of Pole during the short period he held office in England reveals the true nature of the creed of Rome where its actions are unfettered by the civil power. As a consistent Catholic, possessing the opportunity of enforcing his principles, the legate could not, and ought not to, have acted otherwise.

On the condemnation of Cranmer, Pole was raised to the See of Canterbury. He was consecrated March 22, 1556, in Grey Friars Church, and on the following day took the oath of allegiance to the Pope. The new archbishop, attaching much importance to the receiving of the pall from Rome, declined to enter upon his duties until such article had arrived, and thus, as it were, expressed the full Papal approval of the appointment. His Grace had not long to

wait. A few days after his consecration Pole, "accompanied by many lords and barons, and by some of the members of the Council," repaired to Bow Church, and there with all solemnity received the pall. On the conclusion of the ceremony he was asked by the parishioners if he would deign "to commence by giving some spiritual food to those souls which God had committed to his charge." The legate at once complied with their request. There were some, doubtless, among his congregation, he¹ said,¹ who would listen to him out of curiosity or to criticise his words, but to such he would observe that any other learned and elegant scholar might satisfy them vastly better than he was able. Still, he was sure there were also some who would listen to him for the fame of the Word of God, and these he was ready to satisfy, for never should the words of Holy Writ be applied to him: "The young children ask bread, and no man breaketh it unto them." Neither would he imitate those masters who, eating white bread, give black and unsifted to their servants. He would give them the same as he himself ate, and this bread was nothing but the Word of God, which, received in the form and sense in which it was offered, produced miraculous effects and bore the fruit of life for him who embraced it. After alluding to the cause of his coming into England, "for the sake of reconciling this kingdom to God, from whom it had so miserably severed itself, like a limb from its head," he proceeded to explain the ceremony and significance of the pall which he had just received. "So long ago," he said, "as in the time of the Primitive Church, when any one was consecrated as archbishop, by which consecration a power was conferred of such a nature as to be supreme after that of Christ's Vicar on earth, yet it was not lawful to exercise such power until after having received this *pallium*, which, being taken from the body of St. Peter and placed on the archbishop elect, merely signified that, as his power and authority proceeded from that body, so likewise in all his actions he was bound to render a corresponding obedience, like that of members to their head. Thus our Holy Mother Church, ever guided by the Holy Spirit, ordained this ceremony, lest the archbishops, having such great authority and detaching themselves from their head, they might cause much turmoil and disorder in the Church, instead of acknowledging this power as held neither of themselves, nor of others but solely of Christ's Vicar, who is the Roman Pontiff, so that by this regulation the unity of the Church might be preserved for ever. And though in bygone times it

¹ *State Papers relating to English affairs existing in the Archives of Venice.* May 3, 1556.

was greatly disturbed by certain archbishops and patriarchs, it has nevertheless been seen for a notable example that those who acted thus, together with the countries committed to their government, have been by God most severely punished, as were the Patriarchs of Constantinople and of Alexandria, who, having strayed and separated themselves from this unity, passed, by the just judgment of God, under the cruel tyranny and insupportable yoke of the Turks, under which they existed so miserably for so long a while, as is notorious to everybody. The Archbishop of Ravenna, in like manner, of yore greatly opposed this unity, but at length, perceiving his error, was reconciled to and rejoined this head. Thus, then, an archbishop cannot exercise the power given him by the act of consecration until he receive authority to do so by means of this *pallium*, taken, as I have said, from the body of St. Peter, and transmitted to him by Christ's Vicar. . . . And the archbishops so being invested with this *pallium* made of the wool of lambs, and in the form of a cross, ought at the same time to array themselves in humility, charity, and patience, and take up the cross, and be ever ready in need to peril their own lives for the salvation of their flocks, and by all their actions pray the immaculate Lamb for the gift of prudence and of good government, both of themselves and of those committed to their care."

After having delivered this lecture upon the pall, the reception of which had so often led to disputes between England and Rome, Pole then descanted upon the charms of peace. There was only one way, he said, of obtaining true peace. It was not to be found in the science of philosophers, in the wealth of the rich, in the honours and pleasures of the great. Solomon tasted all the most exquisite delights that man in this world could enjoy, and yet at the end he said openly that everything was but vanity and vexation of spirit. True peace and felicity were only to be found in the fear of God and the execution of His holy commandments. And such peace was open to all classes to obtain, for the only things necessary were to embrace Christ our Saviour, who was our true peace, and to obey the teachings of the Church. "The which peace," said Pole, with tears in his eyes, "will quiet your hearts, illumine your minds, and cause you to despise the vain and transitory affairs of this world, making you journey in the way of the Lord, possessing in yourselves the light of life eternal; and when listening to the Word of God, should you perchance ever doubt of any point, you should ask its explanation with all humility, as did the glorious Virgin, and not with a disposition to judge the Word of God as it was judged by Eve, interpreting

it according to your own sense, but rather that, by knowing the will of God, you may be better enabled to execute it. And to whom will you apply for this information?—surely, to none others than to those whom God has appointed through His spouse the Church, with which it will ever remain till the end of time, namely to your curates and ordinaries; and immediately on hearing in what sense you ought to take it conformably to the doctrine of the Holy Catholic Church, then ought you to be ready to execute what you know to be the will of God in like manner as did the glorious Virgin, who said, ‘*Ecce ancilla Domini, fiat mihi secundum verbum tuum* ;’ and do you thus make a sacrifice of your hearts to God and be ready to keep His holy commandments, and then He will come to you, and dwell with you, bringing you the true internal peace, together with the treasure of His wisdom, giving you in this world extreme happiness, and in the other, life and peace eternal; which may God grant to all for ever and ever. Amen.”

“I confess to you honestly,” wrote Marco Faitta, the Cardinal’s secretary,¹ to Yppolito Chizzola, a priest of Venice—who, by the way, was accused at Rome of Lutheranism—“and in all truth, that the greater the grace with which his Right Reverend Lordship delivered this brief sermon thus unprepared, by so much the less is that with which I have described it, omitting moreover many things which I did not write down at the moment, because I was unable to follow so rapidly as he preached.” On the conclusion of the sermon the Cardinal went to dine with the Earl of Pembroke, “this being the first time he has eaten abroad, and the said earl treated him very honourably.”

Legate and archbishop, a prince of the Church and the constant adviser of the throne, Pole had obtained, of honour and dignity, almost all that the world had in its gift. He was now, when his prosperity was most dazzling, to take to heart his own words and learn by his own mortifications that mundane glory was but vanity and vexation of spirit. Seated in the chair of St. Peter was now no longer the friendly Julius, but a pontiff who had always proved himself the bitterest enemy of the English legate. John Peter Caraffa had been elected, solely by the influence of France, to wear the tiara as Paul IV., and consequently his sympathies in the political disputes of the hour were entirely French. War, in spite of the diplomatic efforts of Pole to cement a peace between the two countries, had broken out between Spain and France, and England had been

¹ *State Papers relating to English affairs existing in the Archives of Venice.* May 3, 1556.

gradually drawn into the struggle. The Pope hotly espoused the cause of France, and openly showed himself the foe of the Empire. He accordingly declared that it was impossible for him to be represented in a country with which he was at war, and cancelled Pole's commission. Mary was almost beside herself at this step ; she was now aware of the infidelities of her husband, and of his insolent indifference towards her ; she was detested by the nation on account of her bigotry ; the only two consolations she possessed were her religion and the companionship of the legate who, during the absence of Philip, had been appointed her counsellor and adviser. And now to her awful dismay the Pope, for whom she had sacrificed her subjects' affection, had become her enemy, and the one friend she owned in her solitude was to be deprived of his chief dignity ! She wrote a letter of remonstrance to the Vatican, alluding to the services she had rendered the Holy See, and stating how necessary it was in the present condition of England that a legate with supreme authority should be on the spot to direct and control affairs ; she concluded by imploring Paul to reconsider his decision, and to grant her request. Her petition was strongly supported by the council, who spoke in the highest terms of Pole, and at the same time informed the Supreme Pontiff that the legatine authority had been immemorially attached to the Archbishop of Canterbury.

Paul, softened by this pleading from those who had served him so well, replied that he would gratify the wishes of the Queen ; but at the same time he resolved to wound Pole. His holiness agreed to be represented in England by a legate, but transferred the commission from its present holder to one Peto, a Greenwich friar. To add insult to injury, Paul gave as his reason for this change of appointment that Pole, the earnest, the zealous, the most devoted of Catholics, was suspected of heresy ! To the grief of the Supreme Pontiff, however, the cause he favoured was not successful. Spain was everywhere triumphant, and after the battle of St. Quentin, Paul thought it more prudent to sever his alliance with France and come to terms with Philip. Once more, therefore, there was peace between England and the Vatican ; still, the late unhappy legate was to derive no benefit from the advantages that accrued from the pacification. The Pope refused to reinstate him in the office of legate, though the Greenwich friar was dead, having passed away shortly after the appointment had been conferred on him. In vain Pole pleaded with his enemy. He alluded to the services he had given the Church—services such as no other legate had rendered for centuries ; to the zeal which he had displayed in England ; to the devotion to Rome,

which had been the chief feature in his career ; and then in his old age, after such a faithful past, to be degraded on account of heresy ! It was hard, it was cruel. "Your holiness," he moaned, "is taking my life from me when you take from me the reputation of orthodoxy."

He spoke truly. Mortification, anxiety, and a humiliation that he knew was not deserved, were eating into his very heart and rapidly shortening his days. He had never been strong, and his sickly frame, weakened by recent ague and fever, was robbed of the vitality necessary to make a stand against the depression caused by severe disappointment and grievous injustice. He died within a few hours of the demise of his cousin and queen. Feeble and limited as was his view of the change of feeling consequent upon the accession of Elizabeth, he saw enough to prove to him that his "holy mission" had been a failure, and that a religion founded by force and built up by persecution is a vain and unstable thing, only requiring the terrorism that establishes it to be withdrawn to fall in swift ruin to the ground.

ALEX. CHARLES EWALD.

DR. JOHNSON AND THE FLEET-STREET TAVERNS.

THE traces of Dr. Johnson in this metropolis are fast passing away. They were always interesting, owing to the feeling that they help us to realise many of the scenes depicted in Johnson's *Recollections* great work. Yet these are disappearing, and must disappear with the work of demolition and "opening up," though this last process amounts often to shutting up agreeable associations and pleasant memorials. The work, however, is not to be averted; it is as imperative as Fate; and if Shakespeare's house stood in the line of a new street, the Board of Works would take order that it came down.

Fleet Street is specially sacred to the memory of the Doctor. But Fleet Street is also the favourite scene of action for the spoiler. Temple Bar, on which Goldsmith jested with him, came down not long ago. His chambers in the Inner Temple Lane just by the entrance were levelled some years ago. They must have been like the overhanging houses at the entrance of Middle Temple Lane, one of the most curious bits of old work in London—substantial too, and in good order for their age. We recollect the doorway of his room being set up for auction by Messrs. Puttick or Messrs. Sotheby. One Dr. Richardson, who has written some curious recollections, declares that those who inhabited those rooms took a special pride in the former occupancy.

Fleet Street, interesting in so many ways, is remarkable for many curious little courts and passages into which you make entry under small archways. These are "Johnson's Court," "Bolt Court," "Racquet Court," and the like. Indeed, it is evident that the curious little passage which leads in to the "Cock" must have been originally an entrance to one of these courts on which the tavern gradually encroached. Much the same are found in the Borough, only these lead into great courts and inn yards. But in Fleet Street they are specially interesting, for we can fancy the Doctor tramping up to his favourite tavern.

Passing into the dark alley known as "Wine Office Court," we

Moore, the present landlord; and during each successive occupation the business has increased. I may here mention that, when I first visited the house, I used to meet several very old gentlemen who remembered Dr. Johnson nightly at the 'Cheshire Cheese'; and they have told me, what is not generally known, that the Doctor, whilst living in the Temple, always went to the 'Mitre' or the 'Essex Head'; but when he removed to 'Gough Square' and 'Bolt Court,' he was a constant visitor at the 'Cheshire Cheese,' because nothing but a hurricane would have induced him to cross Fleet Street. All round this neighbourhood, if you want to rent a room or an office, you are sure to be told that it was once the residence of either Dr. Johnson or Oliver Goldsmith! Be that as it may, it is an interesting locality, and a pleasing sign—the 'Old Cheshire Cheese Tavern,' Wine-office Court, Fleet Street—which will afford the present generation, it is hoped, for some time to come, an opportunity of witnessing the kind of tavern in which our forefathers delighted to assemble for refreshment."

Doctor Johnson died in 1788—and this solicitor's acquaintance with the place began scarcely twenty years after the Doctor's death. The old frequenter's memory would therefore have been very fresh. His dedication, too, is pleasant. This worthy reminiscent dedicates his labours, in a quaint inscription, "To the Lawyers and Gentlemen with whom I have dined for more than half a century at the 'Old Cheshire Cheese Tavern,' Wine Office Court, Fleet Street; this work is respectfully dedicated by their obedient servant, Cyrus Jay." 1784.

The reader will note the pleasant distinction between lawyers and gentlemen. "I often dined at the 'Mitre' and the 'Cheshire Cheese;' Johnson and his friends, I was informed, used to do the same, and I was told I should meet individuals who had met them there; this I found to be correct. The company then was more select than in later times. Johnson had been dead above twenty years, but there were Fleet Street tradesmen who well remembered both Johnson and Goldsmith in those places. There was Tyers, a silk merchant of Ludgate Hill, with Colonel Lawrence, who carried the colours of the twentieth regiment at the battle of Minden, ever fond of repeating that his regimental comrades bore the brunt of that celebrated day. The evening was the time we thus met, when the day's business was over. Few then, comparatively, lived at a distance from their offices or shops; if they did, it was mostly in country residences, some way beyond the suburbs of town, to which they repaired on the Saturday, returning on the Monday morning. There

was also a sprinkling of lawyers, old demi-soldes, and men of science. Among the latter, was a Mr. Adams, an optician of Fleet Street, from whom I obtained information about barometers, for I had been an early experimentalist. The left-hand room on entering the 'Cheshire,' and the table on the right on entering that room, having the window at the end, was the table occupied by Johnson and his friends almost uniformly. This table and the room are now as they were when I first saw them, having had the curiosity to visit them recently. They were, and are, too, as Johnson and his friends left them in their time. Johnson's seat was always in the window, and Goldsmith sat on his left hand."

On the other side of Fleet Street we can see the "Mitre Tavern," closing up the end of a court—but not the old original "Mitre" where Johnson sat with Boswell. It was pulled down within living memory, and with it the corner in which the sage used to sit, and which was religiously marked by his bust. Yet even as it stands in its restoration there is something quaint in the feeling, as you enter through a low covered passage from Fleet Street, and see its cheerful open door at the end. There are other taverns with such approaches in the street. The "Old Bell" is curiously retired. The passage to the "Mitre" is as it was in Johnson's day, and his eyes must have been often raised to the old beams that support its roof. Even in its modern shape it retains much that is old-fashioned and rococo. It is like a country tavern in London, with its "ordinary" at noon—and a good one too—and its retirement so close and yet so far from the hum and clatter of Fleet Street.

We have yet another tavern to which we can track him, and which still "stands where it did." We pass from the open *Place* where St. Clement-Danes stands—one of the most Dutch-like spots in London, to which idea the quaint and rather elegant tower lends itself. To hear its chimes, not at midnight, but on some December evening, when the steeple is projected on a cold blue background, while you can see the shadows of the ringers in the bell-tower, is a picturesque feeling. They fling out their janglings more wildly than any peal in London; they are nearer the ground, and the hurly burly is melodious enough. Those tones the Doctor often heard in Gough Square and Bolt Court, and inside he had his favourite seat, to this day reverently marked by a plate and inscription. Yet St. Clement's is in a precarious condition, and when the Law Courts are completed its fate will be decided.

It is, perhaps, GOUGH SQUARE, to which one of the little passages out of Fleet Street leads, that most faithfully preserves the memory

of Johnson. It is rather a court than a square ; so small is it that carriages could never have entered, and it is surrounded with good old brick houses that in their day were of some pretensions. A worthy society has fixed a tablet in the wall, recording that "Here lived Samuel Johnson." The houses are of the good sound old brick ; some have carved porticoes, and one is set off by two rather elegant Corinthian pilasters. There is a pleasant flavour of grave old fashion and retirement about the place, and little has, as yet, been touched or pulled down. Johnson's house faces us, and is about the most conspicuous. He had, of course, merely rooms, as it is a rather large mansion, a little shaken and awry, queerly shaped about the upper story, but snug and compact. It is now "a commercial family boarding-house," and the hall is "cozy" to a degree, with its panelled dado running round and up the twisted stairs in short easy lengths of four or five steps, with a landing—which would suit the Doctor's chest. The whole is in harmony. We can see him labouring up the creaking stairs. A few peaceful trades are in occupation of the place—printers, and the like. It is an old-world spot, and has an old-world air. It suggests a snug country inn.

But, turning to Essex Street, and not many doors down on the left, at the corner of a little cross-passage, leading to the pretty Temple gate, with its light iron work, we come on the ESSEX HEAD TAVERN, an old, mean public-house of well-grimed brick. It was here, in his decay, that Johnson set up a kind of superior club, the "Ivy Lane." Boswell is angry with Hawkins for calling it "an alehouse," as if in contempt ; but certainly, while the "Cheshire Cheese," the "Mitre," and the "Cock" are taverns, this seems to have been more within the category of an ale- or public-house. It has been so rearranged and altered to suit the intentions and purposes of the modern "public," that there is no tracing its former shape. In the passage there is a little room known as the "parlour," underneath which accommodation has been found for a cobbler's stall. They should surely have Johnson's "rules" hung up. Probably they never heard of his name, viewing it much as did an officer of the *Morning Advertiser* when notice of a birth was sent from an eminent novelist's family—it was then customary to insert such without charge in the case of eminent *littérateurs*—"Oo is he?" was the reply ; "what 'ouse does he keep?"

We could wish Johnson had been a frequenter of the "Cock," the most perfect subsisting specimen of the old taverns. Temple Bar passed away to utter indifference, and even some derision ; the old monument was abused, jeered at. Why did it cumber the

ground? Yet it was certainly an attraction. That rumbling under the old gateway, as you entered Fleet Street, had a certain piquancy. Though it was giving way, it was but an idle pretext to say that nothing could be done to repair or restore it. As you passed below, you came within the precincts—you entered the city. There was the Temple to the right, the old gilt “Cock,” not without a certain air of strut and spirit, over the little stunted doorway of the tavern on the left. Now all is open and clear—the city has no beginning.

You go through a little squeezed and panelled passage to enter, and at the end of the passage you pass the little window of the “snuggery,” or bar, of a most inviting sort on a winter’s night, with something simmering on the hob. There sits one whom we might call “Miss Abbey”—like Dickens’s directress of the “Fellowship Porters”—to whom come the waiters, to receive the good hunches of bread, “new or stale,”—which she, according to old unvarying rule, chalks down, or up, on the mahogany sill of the door. All is duly sawdusted. The ceiling of the long low tavern room is on our heads. The windows are small, like skylights, and give upon the hilly passage or lane outside. There are “boxes” or pews all round, with green curtains, of mahogany black as ebony. Both the coveted places—say about a sharp Christmas time—are the two that face the good fire, on which sings a huge kettle. The curious old chimney-piece over it is of carved oak, with strange grinning faces, one of which used to delight Dickens, who invited people’s attention to it particularly. There is a quaintness, too, in the china trays for the pewter mugs, each decorated with an effigy of a cock. On application, those in office produce to you a well-thumbed copy of Defoe’s “History of the Plague,” where the allusion is made to the establishment, and also a little circular box, in which is carefully preserved one of the copper tokens of the house—a little lean, battered piece, with the device of a cock, and the inscriptions “The Cock Alehouse” and “C. H. M. ATT. TEMPLE BARR. 1655.” The “Cock,” says a pleasant writer, has “a right thriving aspect, particularly about the hollow and hungry hour of noon, when William, the head waiter, becomes corporeally manifest, controlling with a certain sententious urbanity the increasing demands upon his attentions and those of his subordinate ministers. ‘O plump head waiter of the Cock!’ apostrophises the ‘Will Waterproof’ of the bard who wears the laurel, in a reverie wherein he conceives the chief attendant of this venerable tavern to have undergone a transition similar to that of Jove’s cupbearer :—

‘ And hence,’ says he, ‘ this halo lives about
The waiter’s hands that reach
To each his perfect pint of stout,
His proper chop to each.
He looks not like the common breed
That with the napkin dally ;
I think he came, like Ganymede,
From some delightful valley.’

And of the redoubtable bird who is supposed to have performed the eagle’s part in this abduction he says :—

‘ The cock was of a larger egg
Than modern poultry drop,
Stept forward on a firmer leg,
And cramm’d a plumper crop.’

The effigies of this tutelary bird, No. 33, which struts with becoming gallantry over the tavern door, are said to have been carved by no less a hand than that of the celebrated Grinling Gibbons. The Great Fire of London was stayed at Temple Bar, and the ‘ Cock ’ tavern looked upon and survived it; and that it was of some standing at that period is proved by the carved fireplace, which appears to date at least from the time of James I. The *Intelligencer*, No. 45, contains the following advertisement: ‘ This is to notify that the master of the Cock and Bottle, commonly called the Cock Ale-house, at Temple Bar, hath dismissed his servants and shut up his house, for this long vacation, intending (God willing) to return at Michaelmas next, so that all persons whatsoever, who have any Accompts with the said master, or *Farthings belonging to the said house*, are desired to repair thither before the 8th of this instant July, and they shall receive satisfaction.’ ”

It is a pity to see that there is not the conservative continuity in the line of waiters, which should be found in such a place. They seem to come and go—go rather than come. They used to be all “ in key,” as it were—had grown stout and old in the service. Latterly time, in its whirligig changes, has brought round changes almost revolutionary, and we find strange, unsuitable beings in office. One was a dry, wiry man of despotic character, who administered on new modern principles, unsuited to the easy-going manners of the place. He dealt with the customers in a prompt, almost harsh style. He knew and recognised no distinction between old frequenters and new. I fancy he was not popular. I believe his place was in the new “ restaurants ” ; but here, among the “ boxes ” and pews, and on the sanded floor, he was an anachronism. So with the old habitués he was a perfect fly in the ointment. When he found himself unpopular,

he adopted a strange device to recommend himself—the compounding a curious sauce, which he called “Pick-ant,” and which he invited guests to try. It did not much avail him, and death has since removed him to pay his own score.

The good old “brown stout” is to be had in perfection at the “Cock,” and port good in its kind. Thus says *Punch* on one occasion :—

LINES WRITTEN AT THE “COCK,” FLEET STREET.

(Dedicated to the Laureate and LOVELACE.)

Champagne will not a dinner make,
Nor Caviare a meal :
Men, gluttonous and rich, may take
Those till they make them ill,
If I've potatoes to my chop,
And after chop have cheese,
Angels in Pond and Spiers's shop
Know no such luxuries !

To stray into this cheerful hostelry of a winter's evening, finding snug shelter, recalls one of those scenes in old inn parlours which Dickens was so fond of describing. Here are cozy red curtains ; the world shut out ; warmth and light. Even the creations of the great writer—or those that he fancied—are found here ; the Temple clerk, the retired solicitor—dry, quiet men of the Perker class, that have come across from their lonely chambers—and sit solitary, content with themselves, while they mix comforting brew of “hot Scotch” or “Irish.” These beings are interesting of their kind, and at times there will hardly be a sound in the place, so placid is the old-world temper of the Tavern.

An old frequenter of the “Cock” remembers the tankards hung round in shining rows, each the special vessel of a customer.

The “all-knowing” Timbs—now, with Peter Cunningham, passed into the domain of the antiquities they both explored so well—was a frequenter of the place, and muses over it, quoting :—

Ah, but let the rusty theme alone,
We know not what we know ;
But for my pliant hour, 'tis gone ;
'Tis gone, and let it go.

“The Apollo Club, at the Devil Tavern, is kept in remembrance by Apollo Court, in Fleet Street, nearly opposite ; next door eastward of which is an old tavern nearly as well known. It is, perhaps, the most primitive place of its kind in the Metropolis : it still possesses a fragment of decoration of the time of James I., and the writer remembers the tavern half a century ago, with considerably more of its

original panelling. Three years later we find Pepys frequenting this tavern : ' 23rd April, 1668. Thence by water to the Temple, and there to the Cock Alehouse, and drank, and eat a lobster, and sang, and mightily merry. To almost night, I carried Mr. Pierce home, and then Knipp and I to the Temple again, and took boat, it being now night.' "

In the "Country Wife," so lately played in such inimitable style by Miss Litton's troupe, we find *Sparkish* saying :—

"Come, but where do we dine?"

Homer : "Ev'n where you will."

Sparkish : "At Chateline's?"

Dorilant : "Yes, if you will."

Sparkish : "Or at the 'Cock'?"

Dorilant : "Yes, if you please."

Sparkish : "Or at the 'Dog and Partridge'?"

Homer : "Ay, if you have a mind to 't, for we shall dine at neither."

It is noted, too, in favour of this worthy old tavern, that its frequenters have been glad to record their sympathy in a sort of affectionate style. Thus the late Mr. Bellew, the elocutionist, was glad to introduce this allusion to a favourite haunt in his novel "Blount Tempest": "In the furthest penfold of the 'Cock,' at Temple Bar, sat Geoffrey Tempest. The office hours of Probyn, Shirley, and Trigg were over, and *Geoffrey had enjoyed his steak, one of the unapproachable rump-steaks of the 'Cock.'* He sat muttering Tennyson's lines—

Thou fattenest by the greasy gleam
In haunts of hungry sinners;
Old Boxes, larded with the steam
Of thirty thousand dinners."¹

Mr. Mark Lemon, who had to pass the tavern every day on his road to the "Punch" office lower down, lays a scene in one of his novels at the little tavern.

"The 'Cock,' in Fleet Street, has been sung by Tennyson, and henceforth stands on classic ground. The student in Lempriere knows that the cock of old was dedicated to Esculapius, but the golden bird in Fleet Street more properly belongs to Themis, for on its mahogany shrines, flocks of sheep in the shape of chops and kidneys, herds of bullocks cut up into large and small steaks, and tons of cheese converted into Welsh rarebits, have been offered up

¹ *Blount Tempest*, by the Rev. J. C. M. Bellew, vol. ii. chap. iv. p. 90.

time out of mind to that legal deity, whilst libations of stout and other alcoholic compounds have been freely poured down the gullets of his priests and acolytes ; as the Temple is on the opposite side of the street, and law, like love, requires to live on something more than the flowers of rhetoric. A long narrow passage brings you at once to a low-roofed dining-room, divided on each side into boxes supplied with the narrowest of seats and tables, the latter covered not at all times (we write of times past) with the cleanest of table-cloths ; and a superstition prevailed formerly—mind, formerly—that by removing the crumb-strewn damask and shaking it, the ‘coming’ had lost all traces of ‘the parting guest!’ The spacious fire-grate, amply filled in winter time, gave a cheerful welcome, and on hot summer days, from its capacity for ventilation, combined with the pervading gloom of the place, made the heat more endurable. A young Templar had given his orders—as the phrase runs—and was preparing to while away the time necessary to execute them, by a perusal of Crabbe’s ‘Digest,’ when his studious intention was interrupted by the entrance into the same box of a quasi-military person, who with a smile and a bow took his seat composedly.

“ ‘Waiter!’

“ ‘Coming, sir,’ replied that functionary, making his way through a door at the upper end of the room, and bawling at the pitch of his voice, ‘Two lamb chops to follow mashed potatoes pint steak very well done.’

“ ‘Extraordinary class of persons are waiters,’ said Elmsley, ‘never can speak the truth, even in their reckoning. Why could not that fellow have said, “Yes, sir—or coming directly, sir,” without adding mendacity to neglect?’

“ ‘Coming,’ I presume; is according to waiter-craft, and has supplanted the “Anon, anon, Sir,” of the old drawer,’ replied Elliott.

“ ‘Waiter!’

“ ‘Coming, sir.’

“ ‘When, sir, when?’ exclaimed Elmsley, rather testily.

“ ‘Beg pardon, Captain!’ said the waiter, flicking off a few crumbs with his soiled napkin. ‘What’ll you have, sir?—chops and steaks, sir—potatoes—no peas, all gone, sir.’

“ ‘That’s provoking,’ said the captain. ‘I had fully calculated upon peas—well, say a small steak—no potatoes, and half a pint of stout.’

“ ‘Yes, sir,’ and bawling ‘coming,’ in reply to another summons, the waiter disappeared as before.

“ ‘I find it advisable to live sparingly this hot weather,’ observed

Elmsley, 'and therefore wander into this locality, as they understand the art of small cookery better here than at the West-end.'

" 'Has it been demonstrated ever,' said the captain, giving a hasty glance at Elliott's well-cooked chop, 'why waiters generally are flat-footed, and wear linen that appears to have been rinsed in pot liquor?'

" 'I never observed those peculiarities,' replied Elliott.

" 'Do, and you will find my observations are correct,' said the captain. 'They also appear to clean the cuffs and lappets of their coats with black lead, which is not always pleasant to look upon. Why they will not imitate the French garçon, with his neat jacket and clean white apron, is a mystery to me. A very small steak this, Edward, very, and no fat. Find me a piece of fat, and—yes—you must bring me potatoes.'

" 'Yes, sir,' replied the man to whom these latter observations were addressed. 'Point steaks are small, sir—Coming! and potatoes directly, sir!'

" 'I presume you are fond of a play?' said Elmsley, when the waiter, having cleared the cloth, furnished the captain with a tooth-pick, and Elliott with a glass of Hollands, for which the 'Cock' enjoyed a celebrity.

" Having discharged their reckoning (which, to the honour of Edward, the waiter, was scrupulously correct, so far as Elmsley was concerned, however seventeen pence might have been transmitted into one shilling and sevenpence in the computation of Elliott's account of sundries), the Captain and the Templar—the Sword and the Gown—proceeded on their way to Drury Lane."¹

Another town antiquary and agreeable writer—Thornbury—has also described it. He, too—a good industrious plodder, full of enthusiasm, and with a pleasant, lively style of writing which Dryasdusts seldom have—has ceased his labours.

"Through a narrow portal, a few doors north-east of Temple Bar, over which a gilt bird proudly struts, have entered many generations of hungry Englishmen. There is no habitué of the 'Cock' Tavern in Fleet Street who has not at some period or another of his prandial existence been informed of the extreme antiquity of that ancient dining place. As you nibbled up the last green leaf of your salad, or drained with a lingering plaintiveness the last drop in your tankard, the head-waiter, after gently correcting the fire, or adjusting the burnished kettle, was in the habit of mitigating the painfulness of Rabelais' 'mauvais quart d'heure' by gravely producing a round

¹ *Wait for the End*, by Mark Lemon, vol. ii. ch. vii. pp. 144-151.

snuff-box, containing a farthing-token of the house at the time of the Plague, and with it a greasy volume of Pepys, thumb'd black by Templars and inky-handed lawyers' clerks, alluding to an advertisement of the period, watching you with benignant condescension as you read words that, though two hundred years old, seem just written.

"In due time, however, the scourge abated, and the landlord of the 'Cock' returned, re-lit his fires in his rusty 'grates, scoured bright his gridirons, and that old carved Jacobean mantelpiece, still over the Fleet Street fireplace, shone cheerily again in the dancing flame.

"Tennyson's verses on Will Waterproof, a plump head-waiter at the 'Cock,' long since dead, have made the Fleet Street hostelry known to thousands who have never trod its sawdust-strewn floor. In early days, when the then unknown poet dwelt in lofty chambers up behind the balustraded parapet of No. 57 Lincoln's-inn-Fields (west side), he used to resort to the 'Cock' for his quiet five-o'clock dinner, and, after a pint of the special port, he probably wrote those verses on Will. The humour in some of them, it must be allowed, is forced, but how graceful and thoughtful are the choicest lines, such as—

But whither would my fancy go?
How out of place he makes
The violet of a legend blow
Among the chops and steaks."

An American visitor took care some years ago to pay the place a visit, and was fortunate enough to see the poet engaged in discussing the favourite delicacies of the place :—

"I had the good fortune the other day to come upon Tennyson taking his chop and kidney at that house, some three doors above the old Temple Bar, which he has made famous, the 'Cock.' I had the curiosity to look for the 'half a pint of port' in the poem, but I saw at the bard's elbow no wine, fruity or crusted, but a plain pewter of stout, which the author of 'Locksley Hall' discussed like any northern farmer of them all. He is aged and worn, and bent in the back, with hollow chest; but I think these are rather the effects of a brooding habit of mind and body than the marks of physical debility, for he looked tough and muscular. Tennyson is not a beauty. There was the head-waiter at the 'Cock,' and it was fine to see him waiting on the Laureate. The man is tremendously conscious of his distinction, and keeps watching guests out of the corner of his eye, to see if they are admiring him. His manner to

Mr. Tennyson was delightful, at once respectful and friendly—just as if he felt himself a partner in the work which has given the ‘Cock’ a sort of literary reputation.”

Such is a brief stock-taking of the existing haunts of Dr. Johnson, the best authority on tavern life, and its highest encomiast. Says the excellent Boswell in his journal: “We dined at an excellent inn, where he expatiated on the felicity of England in its taverns and inns, and triumphed over the French for not having, in any perfection, the tavern life. ‘There is no private house,’ said he, ‘in which people can enjoy themselves so well as at a capital tavern. Let there be ever so great plenty of good things, ever so much grandeur, ever so much elegance, ever so much desire that everybody should be easy; in the nature of things it cannot be: there must always be some degree of care and anxiety. The master of the house is anxious to entertain his guests; the guests are anxious to be agreeable to him; and no man but a very impudent dog indeed can as freely command what is in another man’s house as if it was his own. Whereas, at a tavern, there is a general freedom from anxiety. You are sure you are welcome: and the more noise you make, the more trouble you give, the more good things you call for, the welcomer you are. No servants will attend you with the alacrity which waiters do who are incited by the prospect of an immediate reward in proportion as they please. No, sir; there is nothing which has yet been contrived by man by which so much happiness is produced as by a good tavern or inn.’ He then repeated, with great emotion, Shenstone’s lines:—

‘ Whoe’er has travell’d life’s dull round,
Where’er his stages may have been,
May sigh to think he still has found
The warmest welcome at an inn.’ ”

PERCY FITZGERALD.

THE WILD FOWL OF CANADA.

THERE is always something fascinating about the history and habits of wild fowl. Some, like the heron and bittern, lead solitary lives among the reeds of lonely marshes, avoiding, except in spring, even their own species, and when disturbed take long flights, till they are lost in the sky, as if in indignant protest against the intrusion. Others, again, like the duck species, rejoice in society, and are eminently hospitable. On more than one occasion has the writer, when the shades of evening began to fall on the surface of some large pond in the provinces of Ontario or Quebec, felt so much interest in their gambols that the "Westley Richards" was laid aside for a little, that he might enjoy the scene through the network of reeds that hid the canoe. The pond would be an opening on a fen of perhaps twenty or thirty or even two hundred acres, which had to be reached often through thick jungles of reeds growing out of the marsh. Many such ponds there are on the vast swamps that line the St. Lawrence, and there are still more on the Mississippi; while the slender wild rice, which is Guildhall fare to ducks, invariably grows in patches over the pool. But ducks are not very hard to approach if only the observer will keep away from observation, as an anecdote will shortly illustrate. They hear their fellows calling with loud cackles, as they fly with great velocity through the air; and though they sometimes answer and pass on, they more generally join them. It is regarded as a signal that there is good fare, and the fowl is safe from an intruder. When a duck alights in the water, he places his webbed feet out to stop himself, and spreads his hard, stiff tail-feathers out like a fan; but even then he will go rapidly for a considerable distance along the surface before succeeding in arresting his progress. When a few alight together, the sudden ploughing-up of the water breaks the stillness of the scene very singularly. It is a mistake to suppose, as has often been said, that ducks only decoy to fellows of their own particular species. There are about sixteen different kinds that are most frequently found in Canada, and nothing is commoner than to see a flock composed of half a dozen kinds. When the visitors arrive there is a great demonstration of joy, and much diving and flapping

of wings ; but it is curious to note that there are generally some which hold aloof from it, and lie motionless on the water, with their beaks almost touching their breasts. It is not improbable that there is some difference in the dispositions of ducks ; at any rate, there certainly seems to be in tame ducks. Some of these are noted, soon after they are hatched, as good decoy or "call ducks," as they are designated by French Canadians in the lower provinces, and are much valued. They are employed to call down the wild ducks within range, or else to alight on a pool where the gunner waits till a large number have collected. Other ducks seem to take less interest in a passing flock, and do not even utter a cry as they fly overhead. There is a fine decoy pond in Lancashire, near Hale-on-the-Mersey, where great numbers of birds have been taken in a single season. The gamekeeper, to whose especial charge this pond had been entrusted, assured me that the decoy ducks were so well instructed in their duties that they never entered the long treacherous alleys that looked so tempting to any one of the duck tribe, and were supplied so liberally with floating corn, but which ended in the fatal net. Yet they seemed to make it their business to scour the country round for victims. All sorts of ducks will decoy to their own kind, but I do not remember seeing geese come down to a flock of ducks. Perhaps it is that they fly so high they can see from a distance the danger lurking in the reeds, and pass on to safer grounds. But it is not that they stand on their dignity, certainly, for we often see a flock of ducks and geese rise at the same time from a pool that is disturbed. A beautiful village, Christleton, skirts a lake or pond not very far from Chester, and the few villagers that live on one side of it keep flocks of ducks and geese, which live at a reedy end of the mere.

Swans not unfrequently pass over at the latter end of the summer and the autumn as they leave the Dee, and settle on some private lake for a time. They are, of course, rightly considered private property, though they may not be marked with "hall marks." Still, some wild proclivities have entered their condition, or perhaps were never quite absent from it, as may be noticed by their straight, long, rapid flight from feeding grounds that are not exhausted to others that afford no better fare. There are dainty weeds and mollusca in the lakes of Eaton, or Combermere, or Cholmondeley, and also on the Dee. One feeding ground is hardly superior to another, and the only cause one can reasonably assign for the migration of the swans, and, indeed (where they keep them), the wild ducks, is that, in the memorable words of Worcester, it is an old habit they cannot break off :—

The fox

. . . ne'er so tame, so cherished, and locked up,
Will have a wild trick of his ancestors.

This brings us to another recollection of the marvellous instincts of wild fowl, that know so well their appointed time, and can presage not only a coming winter, but the nature of the winter it will surely be. Severe weather not only sends them farther south, but warns them in good time to go.

But the Canadian wild fowl have an interest even beyond that which pertains to the sportsman or *bon-vivant*. Arctic travellers are all united in one opinion—that birds have told us of regions beyond the frozen seas of the north, where from some cause or other the climate is milder, and the ocean or soil more generous. This has been held by many navigators, and each succeeding explorer has confirmed the wonderful story. When Kane in his small brig penetrated, under unusually favourable circumstances, to the eightieth degree of latitude, he despatched Mr. Merton with the sledges to reconnoitre, and that able man found, after many battles with the ice, that at the eighty-second degree the icebergs and icefloes over which he had been travelling became weaker, the surface rotten, and the snow-drifts softer, until the dogs, terror-stricken, refused to advance, and with much trouble and danger they made their escape to the coast. Mr. Merton then reflected that a great black line he had seen was open water far away to the north, and the unwonted appearance of wild fowl, which had been strangers along the dreary ice packs to the south, convinced him of the accuracy of his belief. But the aquatic birds were here in thousands, and they seemed to be more numerous in the distant mysterious north. The brent goose, the eider, and the king duck were so closely packed together that an Esquimaux who accompanied the little expedition killed two with a single-rifle ball. Here we find a curious clue that the birds have given us to the great mystery of the North Pole. From where this was seen to the North Pole is about 480 nautical miles, and it may be that milder climates, shut out by mountains of ice-ranges, hide what would fill us with wonder. Brent geese, which seem to have prevailed in vast throngs, and may always be known by their wedge-shaped flights, live on marine plants and mollusca. They are not often seen inland unless flying from one estuary to another, and their presence in these high latitudes is a sure indication of an open sea with feeding grounds, quite unknown farther south, on the dreary ice-regions that have so long baffled explorers. All travellers agree in this, and in the admirable work “The Thresholds of the Un-

known Region," Captain Markham has quoted the following from Professor Newton, of Cambridge, which quite carries out my own belief :—

The shores of the British Islands, and of many other countries in the northern hemisphere, are annually, for a longer or shorter period, frequented by countless multitudes of birds, which, there is every reason to believe, resort in summer to very high latitudes for purposes the most important ; and since they continue the practice year after year, they must find the migration conducive to their advantage. There must be some water which is not always frozen ; secondly, there must be some land on which they may lay their feet ; and, thirdly, there must be plenty of food supplied either by the water or by the land, or by both, for their nourishment. It may be worth while to give a short account and to sketch the movements of one species of birds—the knot (*tringa canutus*) of ornithologists. The knot is something half-way between a snipe and a plover. Like many other birds of the same group, the colour of its plumage varies most wonderfully, according to the season of the year. In summer it is of a bright brick red, in winter it is of a sober ash grey. Kept in confinement, it seldom assumes its most brilliant tints, but some approach to them is generally made. Now, the knot comes to this country in spring, and after remaining on our coasts for about a fortnight, can be traced proceeding gradually northwards till it takes its departure. People who have been in Iceland and Greenland have duly noted its appearance in those countries ; but in neither of them is it known to tarry longer than with us ; the summer it would have there to endure is not to its liking ; and as we know it takes no other direction, it must move farther north. We then lose sight of it for some weeks. The older naturalists used to imagine it had been found breeding in all manner of countries, but the naturalists of the present day agree in believing that we know nothing of its nidification. Towards the end of summer it comes to us in still larger flocks than before, and both old birds and young haunt our coasts till November. If the season be a very open one, some may stay later ; but our winter, as a rule, is too much for it, and away it goes southward, and very far southward, too, till the following spring. What has been said of the United Kingdom is equally true of it on the eastern shores of the United States. There it appears in the same abundance, and at the same seasons as with us, and its movements seem to be regulated by the same causes. Hence we may fairly infer that lands visited by the knot in the middle of summer are less sterile than Iceland or Greenland, or it would hardly pass over those countries which are known to be the breeding places for swarms of water birds to resort to regions worse off as regards the supply of food.

An intense interest seems to attach itself to these wandering travellers that have come from the far north. To them the Pole with all its mysteries, and the vast ocean that surrounds it, are familiar objects. They know about the islands it contains, and if they are inhabited, and have seen the magnetic phenomena a thousand times. The journey through the unknown land, of which our ablest and boldest sailors have only seen the threshold, may take us years to accomplish, or may baffle us at last, but there is not one of their number that could not traverse it in a few hours, and that with ease. We know by their flights that they reach untravelled lands and seas where they

can build their nests, and rear their young, and here all our knowledge ends, and we may say with Prospero's daughter—

You oft begun to tell me—but stopt,
And left me to a bootless inquisition.

When the northern seas have frozen over, and flight after flight of birds have travelled southwards, the St. Lawrence and its marshes afford ducks and plover a haven, and endless food supplies, until in its turn it becomes frozen too, and the welcome visitors remove to milder regions; for during winter the temperature of Canada from Quebec to Toronto is only a little less severe than the Arctic regions. 30° below zero is a common state of the atmosphere every year, and in February 1859 it experienced for three days an average temperature of 72° of frost. But even then there were rapids in the large rivers that did not freeze, and these were often alive over the surface with wild ducks that did not go southwards. Here, again, a singular feature presents itself. It is true that most of these ducks were golden-eyes, or whistle-wings, but millions had passed through to the southern breeding grounds, where there is room for more than all. They preferred evidently to rest where they were; and if we take this circumstance in connection with the singular fellow-feeling they have with mankind, as shown by their easy domestication, and their tranquil pleasures in the pond or brook near a farm-house, it is not unreasonable to suppose that, like human beings, they have to a larger extent than other migratory birds their own tastes and fancies for a district, and there is hardly any avoiding the conclusion that a similar impulse to that which induces one Englishman to go for his holiday to the Shetland Islands or Iceland, and another to Egypt or Sicily, prevails among the wild ducks. The length of flight that migratory birds are capable of is quite amazing. We read of birds being found a thousand miles from the nearest shore, and those, too, birds that cannot rest on the water. Stanley mentions the case of a common titlark 900 miles from land alighting on a vessel from Liverpool, and says that an owl has been seen gliding over the Atlantic waves in mid-ocean; one is apt, however, to fancy that in these cases they must have lit upon a vessel and been carried a great portion of the way. But Eastern travellers tell us that the vulture seems to live in the sky; and we know that the tropic bird, in the words of Stanley, "might be fairly called the fairy of the ocean, seen as it is in the genial latitudes of the warmest climates of the globe—now a stationary speck elevated as far as the eye can reach, contrasting with the dark blue sky,

like a spangle in the heavens, then suddenly descending like a falling star, and as suddenly checking its course to hover for a while over the topmost point of a vessel's masts, and then darting like a meteor, with its two long projecting tail-feathers streaming in the air, downwards on a shoal of flying fish." One of these it ascends with, far away into the sky, to enjoy. But the frigate bird is more extraordinary, for, according to the same authority, it hardly ever visits the land except at the breeding season, and is never seen to swim. These, however, are not migratory birds, but it is certain that some of the latter take enormous flights without rest. Last year I sometimes saw in the Liverpool market wild swans that had been shot in Ireland, especially in the earlier part of the severe winter, and these must have come from Iceland ; at least, this is the nearest possible place: yet this entails a flight of more than 700 miles. They might, of course, have rested in Scotland, but even the whole distance would only occupy a few hours. I purchased a young one, which measured, when extended on a larder shelf, five feet two inches, and was in good condition ; and I may say, by the way, that roasted like a wild goose, and served with wild-fowl sauce, it was pronounced excellent, though the edibility of swans is a disputed point. But the chief interest of the bird lay in the beautiful construction of its wing feathers. A chemist in Chester found out the average weight of eight of the principal ones, which differed very little in size, and found that it was 40 grains. So strong was one, that if we grasped the quill, and tied a string round the middle of the feather, which was 16 inches long, it would easily raise from the ground a dead weight of $3\frac{1}{2}$ pounds without straining, though it took twelve of them to make a single ounce ; so that four ounces of them would lift an average-sized man from the ground ! and if they were laid out upon a floor, this four ounces would cover eight superficial feet after allowing for all interstices. But there is another element of power in these feathers which may be noticed to some extent in a common goose quill. If we take hold of the larger strands and work them backwards and forwards gently, we shall see that, without separating, they part a little, and form a rough surface to hold the wind ; and the way the strands work helps on the flight in addition. A glassy surface would cut the air, and cause enormous and profitless labour. We know the difference between swimming through the water and putting our feet against the side of a bath for a stroke. The latter will drive us fifteen or twenty feet with less loss of power than ordinary swimming will take us eight or ten, and this is a fairly apt illustration. To say that four ounces of these quills would raise the weight of a

man, even if such a weight were suspended at three or four inches from the part where the quill was held, is ridiculously to understate the strength of these feathers when arched together in a series. And when we consider that the blow of one of these wings has broken the leg of a man who was sent out on the cruel errand of swan-hopping, we can understand how such muscles can drive wings constructed with such consummate skill to so good a purpose. The flight of a goose is heavy and laboured, that of a duck is rapid and anxious-looking, but a swan literally bounds through the air; indeed, when we see one for the first time, we almost feel giddy at the thought of such a bulky body being supported at a hundred yards in height by two fans, and careering away at the very least at double the rate of a railway express. Any person who never shot one would be sure to miss it, even if it were in range of his gun, for the directness of its flight and the deliberate movements of its pinions would greatly deceive him as to its real velocity. There is, I believe, somewhere, an exhibition of flying machines, representing all kinds of contrivances, many disappointed hopes, and much mechanical ingenuity; but if progress is to be made, and the Pole is ever to be approached by such means, the wing of a swan might be profitably studied.

It is singular that much of the migration of birds takes place at night, especially of the fen-birds, which are in the habit of feeding by night. Late on in the year we may hear the whistling of the wings of ducks of many kinds, and an occasional call-note far overhead in the darkness. Secure in their height, they pass over villages and towns, and seem to have no care except to let their flight be direct towards their destination. The migration of storks is more regular than that of ducks, and in the East the Persians and the Arabs found their almanacs upon it. The "coming of storks" is a festival that announces the departure of winter. These birds, both in America and the East, fly at an enormous height; indeed, they are often invisible, and their locality is only known by the loud, piercing scream that belongs equally to those of the new and the old world.

The woods in Canada present a singularly desolate appearance in winter. There are no thrushes and fieldfares as in ours, but they are one unbroken white ground covered with snow, which in some places is ten feet deep, and often more. The black stems of fir-trees rise out of this, and they form a canopy overhead. The only birds that are met with are partridges, and these, feeding on the seeds of the firs, are often in excellent condition. The way the Canadians shoot them is curious, and not quite what an Englishman would call sportsmanlike. A small dog barks at the foot of a tree, where there

are partridges, and these never stir while he is there ; indeed, the Canadian shoots the lowest bird, and then picks off its higher neighbours. Even the report of a gun has no power to drive them away while the dog is barking. I once knew a rector who was with his son in a wood, and seeing a covey of partridges in a tree, he told him to imitate the barking of a dog, and he thus secured the birds.

In all tales of migration the marvellous history of Audubon's pigeons towers above every other narrative, and it would be passed over in silence, but that it has figured again and again in natural histories ; and even the genial ornithologist, Bishop Stanley, has accepted his figures. Himself a keen observer and a perfect English gentleman, he seems in some way to have believed, without consideration, the amazing figures of the eminent American naturalist. Stanley is the delight of our youth and the delight of our age, and one feels almost indignant that his trustful nature should have been misled so easily. It is stated, on the authority of the great transatlantic naturalist, in Stanley's second volume, that a flock of pigeons he had seen, and as far as possible computed, contained 2,234,272,000 birds. Now, if we can imagine these flying so closely that the beak of one touched the caudal feathers of another, and if we further imagine a column of twenty-five feet wide flying as closely as they well could, it would reach round the world ! and in a fortnight they would consume more grain than the British Isles use in a year. Providence, he adds, has wisely given them great rapidity of flight, otherwise they must have devoured the whole productions of agriculture. One seems to think that, unless their flight took them right away into another planet, we could not look hopefully to the future. But Audubon saw another wonderful sight when the flocks went to roost ; and such masses swarmed on the trees, that " many of them two feet in diameter," he observed, " were broken off at a few feet from the ground, and branches of the tallest had given way " ; this, be it remarked, with the weight of pigeons ! The inhabitants had assembled in great numbers to secure the spoil. " There was little underwood," where " the uproar continued the whole of the night," and men had assembled " with iron pots containing sulphur," and with " torches of pine-knots, and poles and guns," and " fires were lighted, and a magnificent as well as almost terrifying sight presented itself." And, indeed, Mr. Audubon himself was so amazed with the forest falling round him, " as if swept by a tornado," and the wonderful and novel sights he saw, that he could hear nothing, and was " only aware of the firing by seeing the shooters reload." Still the pigeons kept arriving by thousands, alighting everywhere, one above another,

“until solid masses as large as hogsheads were formed on the branches all around.” Solid masses ! He leaves us to conjecture how the sides held together ; and, look at it how we may, these masses were all held by single pigeons, for only one could have his feet on a branch. Perhaps the allusion to hogsheads may give us a slight clue to the wonders he saw on that memorable night. In the western States a pernicious liquid called “old rye” is distilled from Indian corn, and sometimes potatoes, and several other factors I cannot now remember ; but the effects on the human frame are said to be terribly rapid, and are probably all the more so when the sufferer is a subject we may fairly suppose Mr. Audubon to have been, and such as unaccustomed to their insidious power. He seems, however, to have recovered somewhat in the morning, though he had a slight attack before daybreak, and says that, “long before objects were *distinguishable*”—the adjective I have italicised—he saw that “the pigeons began to move off in a direction quite different from that in which they had arrived the evening before,” and “at sunrise all that were able to fly had disappeared.” The shadows, however, had not quite availed—Richard was hardly himself yet—for before the sun had fairly risen he saw “wolves, foxes, lynxes, cougars, bears, raccoons, opossums, and polecats, all sneaking off” from the spoil. These animals all changed for the time their usual habits, and waited for sunrise to seek their lairs, doubtless, that Mr. Audubon might be gratified ; and probably he would, if a little time had been given him, have seen zebras and kangaroos in the interesting but motley group. Yet such men as Swainson gravely indorse the story. I have seen flights of pigeons in America, and great indeed are the numbers that will frequent a beech-nut plantation ; but there is nothing that cannot be pictured easily by an English observer, even if he does not see such gatherings at home.

Duck-shooting in Canada is one of the most delightful sports in the whole range of the excitements of the chase—at any rate, for the shooter—and the following hints may not be useless to those who purpose to try their fortunes. In the first place, though in the right ground and at the right time of the year there is plenty of shooting, it by no means follows that the bag will be large, even for those who can render a good account of partridges or grouse in England. If any one is a good canoe-man, there are great advantages in using a bark canoe made out of the bark of the birch-tree. This tree is all in all to the Indian, or, indeed, French Canadian ; the bark strips off in large flakes, and can be made into basins, or reticules, or huts, or canoes. The writer well remembers at Rice

Lake, when he separated in his canoe from his companions, that a tumbler was forgotten, and the Indian, a remarkably handsome, civil young fellow, who spoke French very well and some English, volunteered at once to "get one," and disappeared in the woods ; he soon returned with a neat drinking-cup made of birch bark, rolled up, and simply but securely fastened with two plugs of hard wood. The only objection to canoes of this material is that one may possibly hurt them on a snag or sunk log of wood, and it wants a little care to shoot from them at first in open water ; but skill in that is soon learned. There is a cedar canoe now made for duck-shooting, that is light and strong ; and it can be painted slate colour, which mingles well with the surroundings. An old-fashioned log canoe, however, is not bad, and very steady in the water. They are called dug-outs, from the way they are made. A pine-tree is felled and shaped outside with axes, and the inside is simply a hollow scooped and burned out. A man who knows the marshes and the creeks that intersect them sits in the stern of one of these boats, and with a single paddle drives her easily along. The shooter sits in the front, and sees the ducks rise up from the reeds before him or on either side ; but the bag is made either just after dawn or before sunset ; for, excepting late on in the year, ducks lie very close, and, indeed, seem to get out of the way at midday. They always choose some inaccessible part of a marsh, where there is not water enough to paddle a canoe and the bog is too deep to wade. Many acres of such places are always to be found in Canadian marshes. If a deep creek intersects the marsh, it is well, except in very warm weather, to paddle up its windings, and raise the fowl from the bends where they have been feeding or rather resting. We have sometimes seen immense numbers of ducks go to some distant part of a marsh that could be reached by a creek, but where the marsh itself was so boggy that they felt safe. Sometimes by paddling silently up to it, and suddenly making a loud noise, we could get several shots, but quite as often it was impossible to rouse them, and occasionally, after shouting and striking the side of the canoe with a paddle, we have left the place, but hardly proceeded a hundred yards when, with the loudest cacklings as if to attract our attention, a score of ducks that had been within a few yards of where we lay have risen from the marsh. But, on the other hand, I have known ducks come to within a short distance of where unrestrained talking was going on, and not show any concern. On one occasion we had decided to lunch at a "pond" in the marsh which could be seen from a great distance, as a black larch stem that had long since been dead had sprung from it,

and still braved the storm, though the foundations it had grown on had sunk. Well, we met on the edge of the pond, and after lunching, and while smoking a cigar and arranging our various schemes for the duck-shooting ("flight," as it is called) at sun-down, one of our men, peering through the reeds, suddenly raised his hand and crouched. There was an end to conversation at once, and we took our guns and looked round and saw at least fifteen black ducks within twenty yards, appearing as if they were more asleep than awake; but a blow on the side of the canoe put them up, and our two guns secured four splendid birds. The singular part of this is that it was on September 8, during a very warm season, and the northern ducks, that are "so unaccustomed to man," had not begun to arrive. Probably the flock were an early brood or two, that had been reared in some lonely part of a marsh, and had not heard many human voices. They must have been in a nook in some distant part of the pond, and gradually paddled themselves along to where we lay, getting accustomed to our voices as they approached. But it is well known that driven grouse are more frightened by a figure moving behind a stone wall than by any amount of talking from one shooter to another, so long as the sportsmen do not enter an appearance. One great trouble to the duck-shooter who tries the bays and creeks during the daytime is the number of water-hens that will insist on congregating with the ducks, and, as they are always watchful, they commence a garrulous chatter and fly screaming along the water so as to scare their companions; several times at dusk I have mistaken one for a wood-duck as it suddenly rose with a scream from behind some tuft, and shot it in mistake. The bald-headed coots also consort with these, but they do not give so much trouble, as they are more shy.

Now, the real difficulty of successful duck-shooting consists in this: you see them as a rule for only a few moments, and have no notice of their coming. You stand up in your canoe, which has been pushed into some thick jungle of reeds and bulrushes, all of which are as high as you are, and, secure from observation so long as you do not wear a hat or a garment that contrasts strongly with them in tone, you wait until a flight of two or three birds passes,—and as a general rule I have calculated that you do not see them for more than about three seconds. A great sea of reeds and flags and rushes six feet high shuts out the surroundings, and it is necessary to be continually on the alert, and, as a bird rushes past, to kill it dead, as it will otherwise fall in the pond or marsh, and easily elude any attempt to take it. Ducks fly often so low that it would not be possible for any amount of skill and quickness to arrest

their progress, as they are not visible over the tops of the reeds for a single second; indeed, I have known one pass between the caps of the gunner and his canoe-man, and be seen and gone before a hammer could be drawn back ; certainly a charge would have blown it to pieces if a gun had by any combination of chances gone off in its way. When, however, the birds fly at fifteen or twenty yards high, they may be seen for a short time, and they afford an opportunity to raise the gun. Along the lower St. Lawrence the flocks of sea ducks are simply enormous at times—at least, of ducks that I have judged to be sea ducks, though it is not impossible that many valuable species may have been mingled with them ; but I have seen flocks on the salt water that cannot have covered less than fifty or sixty acres, or numbered fewer than two or three hundred thousand, and as they rose the foam on the gulf was like that left after a storm, and one could hardly help feeling a sort of humiliation at the thought that all the mysteries of all the Arctic regions were as familiar to the greater part of the flock as Trafalgar Square is to us; and even when Jacques Cartier sailed down the St. Lawrence, a journey from Quebec to the Pole would have taken any of the ancestors of the flock less time and caused less inconvenience than a journey from Liverpool or Manchester to London would have done to the wealthiest man in England. Waterton, in his charming work, shows us his sympathy with the same idea. In his grounds was a beautiful lake that surrounded his house, and in this he could always study the habits of wild fowl, for they congregated there in thousands, knowing they were secure at Walton Hall. He says, “ Though I dislike the cold and dreary months of winter as much as any man can well dislike them, still I always feel sorry when the returning sun prepares the way for the wild fowl to commence their annual migratory journey into the unknown regions of the north. Their flights through the heavens and their sportings on the pool never fail to impart both pleasure and instruction to me. When the time of their departure comes, I bid my charming company farewell, and from my heart I wish them a safe return.”

There is not room left to say very much about the different kinds of ducks that principally are found in North America. The one most commonly prized, always excepting the canvas-back of Chesapeake Bay, is the black duck. It is the size of a large mallard, and is of a dusky brown colour, with a bar of white and of shot blue on its wings. Their habits seem in all respects to be the same as the mallards, and they require a fairly good shot to bring them down. They breed all along the marshes of the St. Lawrence, and also

migrate to the far north, the northern broods beginning to arrive on the Canadian marshes about the middle of October, then passing south, while others take their place. Their food is the wild rice, and the roots of this plant, which are something like small garden turnips. So fat do they become, that it was common in the writer's experience to fill jars with wild-duck oil for home use in the same way that the "leaf" of a goose is used in England. Black ducks will sometimes become domesticated, but a wild life always suits them best. I once saw two in a shop in Chester that had been shot, it was said, on a preserved pool of Sir Piers Mostyn's, but I cannot account for their being there, unless, indeed, a few eggs had been brought from Canada. The nest is often in the middle of a pond; it is securely laced together with osiers, and balanced firmly on strong reeds, that shoot up from under the surface of the water. These birds rise heavily from the marsh, but attain in a few minutes to a great velocity of flight. A more interesting duck is the widgeon, that leaves England late, and is believed to go to the very far north. The interest attaching to this bird is that it differs from other ducks in not being a night-feeder. When teal or mallards are idly floating along the water, the widgeon is busily grazing; and when not molested, it soon becomes friendly with tame geese, and is seen grazing in their flocks. Now, if, as Arctic voyagers say, these birds are seen flying southward over the great frozen barrier of the north, it certainly seems probable that grass or some equivalent must be found there. Sometimes, it is true, they build in the north of Scotland, according to Mr. Selby and Sir William Jardine. They both were fortunate enough to find one or two instances of this, and describe their nests as being built among rushes and reeds, and formed of the same materials, all being very cleverly concealed. I find in "Waterton" a similar conjecture as to the breeding-grounds of the widgeon, and he concludes also that grass must be found in the far regions of the north: "Should this conjecture prove well founded," he says, "we can account for the widgeon remaining with us till the beginning of May, at which period all the migratory water birds (saving a few teal which are known to breed in England) must be busily employed far away from us, in the essential work of incubation. Though we are quite ignorant of the manner and place in which the widgeon makes its nest, and of the number and colour of its eggs, still we are in possession of a clue to lead us to the fact that it hatches its young long after its congeners, the mallards, have hatched theirs. The mallards return here in full plumage early in the month of October, but the widgeons are in their mottled plumage

as late as the end of November." I do not remember to have seen a nest of these birds in Canada, but as of course Sir W. Jardine and Mr. Selby wrote at a later period than Waterton, it is quite possible that nests existed in his time which he never had come across, and equally possible that some few birds may build in Canada ; but wherever they breed, they visit Canada from their far-off seas and continents late in the year, to have their numbers thinned by the gunner before they go farther south.

O tandem magnis pelagi defuncte periclis !
Sed terræ graviora manent.

The common mallard (*anas boschas*), that is so universally found in English pools and rivers in winter, is not at all so common in Canada, though it frequents the far west and the south-west in great numbers ; but in the St. Lawrence marshes, if a bag of 100 ducks is made, it is probable that not two will be mallards. These birds build quite a small nest on the dry land, and always under cover, either in a wood or under a hedge in a remote place, and that, perhaps, illustrates their tendency to domestication, for they are the principal stock from which our farmyard ducks have descended. In Canada the black duck predominates in the farmyard type, as the mallard does in England, though, of course, in both we not only see the mixture of other types, but the alteration of plumage in confinement ; still, the mallard and the black duck often reappear in the most perfect plumage, the offspring of ducks without any distinguishing markings at all. There are two teals commonly found in Canada, the blue-winged teal and the green-winged. The latter is identical with the English, and indeed, as this is known to nidificate in Iceland, it is possible that the offspring of English teal may vary their pastures to Greenland, and so descend upon Canada. Blue-winged teals are somewhat longer and more graceful, and it is a matter of wonder to me that they are never seen in England, for they certainly seem to belong to the same family. It may be more nearly allied to the garganey than the teal, but it has not yet been my lot to meet with a specimen of this rare water-fowl in England. The blue-winged teal are much more numerous than the green-winged teal, and are even superior birds. They considerably seek their feeding-grounds at a later period of the morning than other ducks, and that in little knots of three or four, or sometimes in a small flock of fifteen or twenty. Their wings are long, and their flight is like a shadow as they pass. If two pass by, it requires a wonderful shot to secure them both, for the whole time they are in range as they come and go is perhaps two seconds. The writer has, indeed, sometimes done so, but freely admits that it has

been by the most erratic of flukes, and he hardly felt it honest to hear the guttural admiration of the canoe-man without some little attempt at a disclaimer. These blue-winged teal, however, will make a very good bag at times ; they do not avoid a canoe in the same way that other ducks do, and though you have them in range only for a moment, you can see them coming, for they fly over the open water, and seem to trust to their smallness and amazing fleetness. They are simply delicious for the table, and quite as tender as a wood-cock. The writer remembers on one occasion, late on in the year, hearing through the tall hollow reeds and rushes a very unusual sound, evidently proceeding from many sources, till, as we approached nearer, it almost filled the air. It was at the latter end of October, and the wild fowl of all kinds were gathering together to make one more movement south ; but, in this secluded marsh, which was, however, of vast dimensions, a flock of blue-winged teal, which must have numbered at least four or five thousand, suddenly rose above the reeds. I never saw any sight like it. They made straight for the canoe ; indeed, it so happened that they had not heard mine, but were put up by a canoe or boat from quite the other side. The first shot did little damage, but it packed the birds that were coming on behind, so as to be ready for the second barrel, and I managed to secure eleven ducks, in very fine condition, by what would be correctly termed a " pot " shot. One of the most beautiful ducks in the world is the Canada wood-duck. It differs from any of the others in having a back claw that enables it to perch on trees, and in trees it builds its nest. It is between a mallard and a teal in size, and the markings of the drake in October are wonderfully beautiful. Some of the islands that nestle in the bays of the St. Lawrence are covered with oaks, and here wood-ducks may always be found. They keep close under the shore, and fatten on the acorns that fall into the water and drift into a mass with leaves and twigs. We are all acquainted with the plumage of this beautiful bird from specimens in botanic gardens or private ponds, and it is almost a wonder that it has not been domesticated for farmhouse use. A fabulous price is given for wing-feathers for dressing salmon flies, but I suspect the real value of these flies is their beautiful appearance in the fly-book and their comparative rareness ; for actual service, a dusky hackle would be preferred. The pintail duck is precisely the same in habits and appearance as our own. They are quite common in marshes and rivers in England, and are often called the sea-pheasant. The male is a beautiful bird, but the female, as in the case of the wood-duck and mallard, is a dull brownish creature. These birds seem to have a liking for inland journeys, and are often raised from

ponds in the middle of dry farms, if there is a little growth round the sides. The poachard is similar to our own bird of the same name, and like it excels in diving and getting away if wounded. They bear a great resemblance to the canvas-back if fed in the same places ; but though they have been called the same bird, I believe them to be a totally different species. Still, when fed on wild rice beds, and in really good condition, they are but little inferior to that celebrated bird. I have occasionally caught young ones, and tried to bring them up with other kinds of ducks, but never succeeded. It seems as if they pined in captivity, though, as a very general rule, a little feeling of security will win over any wild duck. Naturalists, in order to make a distinction between this and the canvas-back, have called it *anas rubida*, the name of the latter being *anas vallisneria*.

Amongst the other ducks are the *anas marilla*, or scoup duck, or blue-bill, which is so called from the singular colour of its bill. It breeds in the far north, and frequents the rice marshes of Canada from the end of September until the winter has closed them up. It flies with great swiftness, but is not so shy as the black duck ; and with it comes the tiny *anas albeola*, buffle-head, or, as it is sometimes called, butter-ball. This duck, I believe, is not found in Europe, but in America it is very abundant. When divested of its feathers, and appearing on the table, where it is always welcomed as a breakfast dish, it is scarcely larger than a pigeon. There is also the *glacialis* or long-tailed duck, and the various kinds of *anas nigra*, or scoter, the ruddy duck, and the beautiful *anas labradoria*, or pied duck, a species peculiar to America. It is calculated that there are thirty-two species of ducks in Europe, and thirty-one in North America, and of these twenty-one are common to both countries, leaving eleven peculiar to America. Though there are great numbers of wild ducks left in England, their numbers are small as compared with what were formerly found. Pennant had the records of ten decoys sent to him, and these numbered 32,000 birds in a single winter. Still, they will always be found in winter in this country ; and if a law similar to one passed in a western state of America, that prohibited the shooting of prairie hens for two years, were passed for ducks in England, the immense flights from the north that used to visit us would reappear in equal numbers, and spread over our lakes, and rivers, and marshes ; but, though it is not generally known, the game laws are in some respects more rigid in America and Canada than people would submit to in England.

The aptitude of ducks for domestic life is curious ; not only do they seem to sun themselves in human society in their lazy way, but they endeavour to induce their wild fellows to join the farmyard.

Often their conduct seems strange, as the following anecdote, which is accurate, will show, though the scene lay not in Canada, but near Delamere Forest in Cheshire. A farmer had lost some very valuable ducks, and he supposed the foxes had relieved him of their charge, for these animals are very numerous in those parts. There were three pairs missing, and he supposed he should never see them again ; but late in the autumn after his loss, his heart was rejoiced on hearing the cackling of forty or fifty ducks in his farmyard, and there he found the truants with a goodly following. All was now clear. The parent ducks had built by the side of some marshy pool or mere, of which there are many in the forest, and being at no loss for food, had brought up their progeny till the signs of what proved to be a very severe winter reminded them that they had brought them up in the wilderness ; and as they were not able to fly to milder skies, the parent ducks bethought themselves of the fleshpots of Egypt, and returned with the colony. But another anecdote illustrates the freaks of gregariousness in the duck tribe more curiously. On the north side of Lake Ontario is a large bay called the Bay of Quinte, which is, in fact, the vast marsh through which the waters of Rice Lake, so dear to duck-shooters, empty themselves into Lake Ontario. Round this bay are lands of great richness, and many wealthy farmers. A son of one of these had collected a number of mallards' eggs and put them under sitting hens on the farm, and they were hatched, and seemed to thrive well, disappearing sometimes during the summer days on the neighbouring marsh, and always returning before very long to the farm. They remained over winter, and seemed to be domesticated ; but in the spring, when flights of ducks were making their way northward, they saw a flock of golden-eyes passing over the field, and—it is supposed that the season of the year had much to do with it—they suddenly joined the flock with more alacrity in their flight than the farmer's daughter who had seen them rise thought possible, and left their home. But in this instance, again, old familiar scenes appear to have dwelt on their minds, and they sought their former abode ; for, to the amazement of the farmer, a flock of mallards, when the birds were flying southward in the "fall," as autumn is termed in America, wheeled round his fields for some little time, and settled down close by his house, where they remained during the rest of the fall-time ; and it grieves me to say that the old mallards and their broods, so generously confided to his care, were utilised for the larder, so that we have no knowledge of what their subsequent conduct would have been, or if, when winter finally hardened the ground, they would have joined their garrulous fellows overhead.

ALFRED RIMMER.

THE WILL-O'-THE-WISP AND ITS FOLK-LORE.

AMONG the many sources of superstition in this and other countries, the phenomenon well known as the Will-o'-the-Wisp has from time immemorial held a prominent place. Indeed, it would be no easy task to enumerate the various shapes in which the imagination has pictured this mysterious appearance, not to mention the manifold legends that have clustered round it. In days gone by, when our credulous forefathers believed in the intervention of fairies in human affairs, the Will-o'-the-Wisp entered largely into their notions respecting the agency of these little beings in their dealings with mankind; and, as will be seen in the course of the present paper, numerous stories were often related in which some fairy disguised as Will-o'-the-Wisp was the chief character. It is worthy, too, of note that, although in these enlightened days every relic of primitive culture is gradually fading from our gaze, the old superstitious fancies associated with this nocturnal visitor still survive with more or less vigour, retaining that hold on the vulgar mind which they formerly possessed. Thus, in remote villages and secluded country nooks the peasant, whilst not forgetting the traditions handed down to him, continues to believe with implicit faith in those quaint and weird fancies which have invested the Will-o'-the-Wisp with such a peculiar dread. This terror, as we shall point out, in a great measure originated in the many tales and legends that were in past centuries framed to explain and account for this deceptive phenomenon.

Referring, then, in the first place, to the various names assigned to it; many of these are extremely curious, differing according to the country and locality. Its most popular appellation, Will-o'-the-Wisp, was probably derived from its customary appearance; this wandering meteor having been personified because it looked to the spectators like a person carrying a lighted straw torch in his hand. Hence it has been termed Jack, Gill, Joan, Will, or Robin, indifferently, in accordance with the fancy of the rustic mind; the supposed spirit

of the lamp being thought to resemble either a male or female apparition. Hentzner, for instance, in his "Travels in England" (1598) relates how returning from Canterbury to Dover, "there were a great many Jack-a-lanterns, so that we were quite seized with horror and amazement."

In Worcestershire, the phenomenon is termed by the several names of "Hob-and-his-Lantern," "Hobany's Lantern," and "Hoberdy's Lantern"—the word Hob in each case being the same name as occurs in connection with the phrase hobgoblin. It appears that, in days gone by, Hob was a frequent name among common people, and curiously enough Coriolanus (Act ii. sc. 3) speaks of it as used by the citizens of Rome :—

Why in this wolvish gown should I stand here,
To beg of Hob and Dick, that do appear
Their needless vouches ?

Subsequently, Hob seems to have been used as a substitute for Hobgoblin, as in Beaumont and Fletcher's "Monsieur Thomas" (Act iv. sc. 6) :—

From elves, hobs, and fairies,
From fire-drakes or fiends,
And such as the devil sends,
Defend us, good Heaven !

A Northamptonshire name is Jinny Buntail, which is evidently a corruption of Jinn with the burnt tail, or "Jild burnt tail," an allusion to which occurs in Gayton's "Notes on Don Quixote" (1654, 97), where we read of "Will with the Wispe, or Gyl burnt taylor," and again (268) of "An *ignis fatuus*, or exhalation, and Gillon a burnt taylor, or Will with the Wispe." The Somersetshire peasant talks of "Joan-in-the-Wad," and "Jack-a-Wad," Wad and Wisp being synonymous. In Suffolk it was known as "A Gylham lamp," in reference to which we are told in Gough's "Camden" (ii. 90) how "in the low grounds at Sylham, just by Wingfield, are the *ignes fatui*, commonly called Sylham lamps, the terror and destruction of travellers, and even of the inhabitants, who are frequently misled by them."

Another of its popular nicknames in former years was "Kit of the Canstick"—*i.e.* candlestick ; and in "Poor Robin's Almanack" for 1777 it is styled "Peg-a-lantern" :—

I should indeed as soon expect
That Peg-a-lantern would direct
Me straightway home on misty night;
As wand'ring stars, quite out of sight,
Pegg's dancing light does oft betray,
And lead her followers astray.

The expression *ignis fatuus*, or foolish fire, originated in its leading men astray, as in the "Tempest" (Act iv. sc. 1), where Stephanio says : "Monster, your fairy, which you say is a harmless fairy, has done little better than played the jack with us ;"—a passage which is explained by Johnson thus : "He has played Jack-with-a-lantern ; he has led us about like an *ignis fatuus*, by which travellers are decoyed into the mire." Thus Gray describes it :—

How Will-a'-Wisp misleads night-gazing clowns
O'er hills, and sinking bogs, and pathless downs.

In Scotland, one of the names for this appearance is "Dank Will," and in Ireland it is known as "Miscann Many" ; an allusion to which occurs in Croker's "Fairy Legends of the South of Ireland" in the story of the "Spirit Horse," where Morty Sullivan is so sadly deluded by it.

Again, the term "Fire-drake,"¹ which is jocularly used in "Henry VIII." (Act v. sc. 4) for a man with a red face, was one of the popular names for the Will-o'-the-Wisp ; in allusion to which Burton in his "Anatomie of Melancholy" says : "Fiery spirits or devils are such as commonly work by fire-drakes or *ignes fatui*, which lead men often in *flumina et præcipitia*." It appears, also, that in Shakespeare's day "a walking fire" was another common name for the Will-o'-the-Wisp ; to which he probably refers in "King Lear" (Act iv. sc. 3), where, Gloster's torch being seen in the distance, the fool says, "Look, here comes a walking fire ;" whereupon Edgar replies, "This is the foul fiend Flibbertigibet ; he begins at Curfew and walks till the first cock." Hence Mr. Hunter² considers that Flibbertigibet was a name for the Will-o'-the-Wisp. That, however, this phenomenon was known as the "Walking Fire" is evident from the old story "How Robin Goodfellow led a company of Fellowes out of their way."³ "A company of young men having been making merry with their sweethearts were, at their coming home, to come over a heath. Robin Goodfellow, knowing of it, met them, and, to make some pastime, he led them up and down the heath a whole night, so that they could not get out of it : for he went before them in the shape of 'a walking fire,' which they all saw and followed till

¹ A "Fire-drake" appears to have been also an artificial firework—as in Middleton's "Five Gallants":—

But, like firedrakes,
Mounted a little, gave a crack, and fell.

² *New Illustrations of the Life, Studies, and Writings of Shakespeare*, ii. 272.

³ Hazlitt's *Fairy Mythology of Shakespeare*, 1875. 186.

the day did appear; then Robin left them, and at his departure spake these words—

Get home, you merry lads,
Tell your mammies and your dads,
And all those that newes desire
How you saw a walking fire;
Wenches that doe smile and lispe
Use to call me Willy Wispe.”

The Will-o'-the-Wisp is not, it would seem, confined to land—sailors often meeting with it at sea—an elegant description of which is given by Ariel in the “*Tempest*” (Act i. sc. 2):—

Sometimes I'd divide
And burn in many places ; on the topmast,
The yards and bowspit ; would I flame distinctly,
Then meet and join.

It is called by the French and Spaniards inhabiting the coasts of the Mediterranean St. Helene's or St. Telme's fires ; by the Italians, the fire of St. Peter and St. Nicholas.¹ It is also known as the fire of St. Helen, St. Herm, and St. Clare. Whenever it appeared as a single flame it was supposed by the ancients to be Helena, the sister of Castor and Pollux, and to bring ill luck, from the calamities which this lady is known to have caused in the Trojan war. When it came as a double flame, it was called Castor and Pollux, and accounted a good omen. It has also been described as a little blaze of fire, sometimes appearing by night on the tops of soldiers' lances, or at sea on masts and sailyards, whirling and leaping in the twinkling of an eye from one place to another. According to some, it never appears but after a tempest, and is supposed to lead people to suicide by drowning. Douce,² commenting on the passage in the “*Tempest*,” quoted above, thinks that Shakespeare consulted Batman's “*Golden books of the leaden goddes*,” who, speaking of Castor and Pollux, says : “They were figured like two lamps or crescent lights, one on the top of a mast, the other on the stem or foreship.” He adds that if the first light appears in the foreship and ascends upwards, it is a sign of good luck ; if either light begins at the top-mast and descends towards the sea, it is a sign of a tempest. In taking, therefore, the latter position, Ariel had fulfilled the commands of Prospero to raise a storm. This, then, coincides with the following lines³ :—

¹ Brand's *Pop. Antiq.*, 1849, iii. 400-401.

² Douce's *Illustrations of Shakespeare*, 1839, 3.

³ Swainson's *Weather Lore*, 193.

Last night I saw Saint Elmo's stars,
With their glittering lanterns all at play
On the tops of the masts and tips of the spars,
And I knew we should have foul weather that day.

A curious illustration of this phenomenon is recorded in "Hakluyt's Voyages" (1598, iii. 450): "I do remember that in the great and boisterous storm of this foul weather, in the night there came upon the top of our mainyard and mainmast a certain little light, much like unto the light of a little candle, which the Spaniards call the *Cuerpo Santo*. This light continued aboard our ship about three houres, flying from mast to mast, and from top to top; and sometimes it would be in two or three places at once." This meteor was by some supposed to be a spirit, and by others an exhalation of moist vapours, thought to be engendered by foul and tempestuous weather.

Referring, in the next place, to the legends associated with the Will-o'-the-Wisp, we may mention that these, although differing in many respects, generally invest this strange mimicry in nature with the supernatural element, which is said to be generally exercised for the purpose of deluding, in some way or other, the benighted traveller. Indeed, it would seem that in past centuries whatever phenomena were of an apparently illusive or hostile character were regarded by primitive science as specially designed to work pain or evil, even although, by way of treacherous bait, they might possess the most attractive qualities. Thus, as Mr. Conway has pointed out in his excellent work on "Demonology and Devil Lore" (1880, ii. 212), because many a pilgrim "perished through a confidence in the lake-pictures of the mirage which led to carelessness about economising his skin of water, the mirage gained its present name—Bahr Sheitan, or Devil's Water." Thus, oftentimes, the harmless and beautiful phenomena in nature have been invested with an evil name; simply because our ancestors, living in the childhood of the world, were unable to comprehend their meaning, and so in all the freshness of their creative fancy regarded them as demoniacal agencies to thwart and hinder man's progress in moral culture. Strange, therefore, as it may seem, we in our nineteenth century have in many of the legends that survive in this and other countries relics of Aryan science, which, although meaningless to the casual observer, yet embody the teaching of primitive man.

In this country the Will-o'-the-Wisp has been connected with the fairy race from early times, a fact proved by its old name of Elf-fire. The same notion, too, existed in Germany, for Grimm informs us

that it was there formerly known as Elglicht ; and in Denmark as Vaettylis. On this point Mr. Brand¹ has rightly remarked that the naturalists of the dark ages "owed many obligations to our fairies, for whatever they found wonderful and could not account for, they easily got rid of by charging to their account. Thus they called those which have since been supposed to have been the heads of arrows or spears, before the use of iron was known, *Elfshots*." In the same way Shakespeare uses the expression "Elfish-marked";² and also speaks of Elf-locks in "Romeo and Juliet"³—

This is that very Mab
That plats the manes of horses in the night
And bakes the elf-locks in foul sluttish hairs,
Which, once untangled, much misfortune bodes.

A disease, too, consisting of a hardness of the side was in days gone by termed Elf-cake. Just, then, as the fairies were supposed to be guilty of committing various pranks as seen in the sundry mishaps that befall humanity, so the Will-o'-the-Wisp with its treacherous light was reckoned amongst them. Thus Shakespeare represents Puck as transforming himself into a fire, by which he clearly alluded to the Will-o'-the-Wisp; and it may be remembered how the fairy asks him⁴—

Are you not he
That fright the maidens of the villagery,
Mislead night-wanderers, laughing at their harm :

We have already noticed, too, Shakespeare's allusion to Ariel's assuming this form, who, like Puck, is a fairy. The term Puck, which is evidently the same as the old word "Pouke," a devil or evil spirit, still survives, although its spelling in lapse of years has become somewhat altered. The following passage from a modern writer⁵ proves too that in some places the idea of Puck as a delusive fairy haunting the woods and fields is not yet extinct: "The peasants in certain districts of Worcestershire say that they are sometimes what they call 'Poake-ledden,' that is, they are occasionally waylaid in the night by a mischievous sprite whom they call Poake, who leads them into ditches, bogs, pools, and other such scrapes, often sets up a loud laugh, and leaves them, quite bewildered, in the lurch." This corresponds with what in

¹ *Pop. Antiq.*, 1849, ii. 490.

² "Richard III., Act i. sc. 3.

³ "Romeo and Juliet," Act i. sc. 4.

⁴ "Midsummer Night's Dream," Act. i. sc. 1.

⁵ Mr. J. Allies' *On the Ignis Fatuus*.

Devon is called being Pixy-led ; and various stories are told how the frolicsome pixies deceive travellers with the Will-o'-the-Wisp, and chuckle over their dismay when they are lost for a time on the moor. By moonlight the Pixy-Monarch was supposed to hold his court, where, like Titania, he gave his subjects their several charges. Some were sent to the mines, where they either good-naturedly led the miner to the richest lode, or maliciously, by noises imitating the stroke of the hammer, and by "false fires," drew him on to the worst ore in the mine. Countless are the stories told in Devonshire of these Pixy illusions ; and a popular means of counteracting them was to turn one's coat inside out—a remedy which appears to have been in use in other parts of England, being mentioned by Bishop Corbet in his "Iter Boreale" :—

William found
A mean for our deliverance. Turne your cloakes,
Quoth hee, for Puck is busy in these oakes ;
If ever wee at Bosworth Hill be found,
Then turne your cloakes, for this is fairy ground.

In Cornwall, a strong belief prevails about the mischievous pranks of the piskies, and they are the subject of numerous superstitions. They are said to control the mist, and to have the power, when so disposed, of casting a thick veil over the traveller as he returns home after sunset. Hence the peasant may occasionally be heard uttering the following petition with a certain degree of faith:—

Jack o' the Lantern, Joan the wad,
Who tickled the maid and made her mad,
Light me home, the weather's bad.

By the Dorsetshire folk, this mysterious fairy is called a Pexy and Colpexy ; and in Hampshire the Colt-pixy was the supposed sprite who led horses into bogs and other outlandish places. Once more, as a further proof of the connection of the elfin or fairy-face with the *ignis fatuus*, it may be noted that "Mab-led," pronounced Mob-led, signified led astray by a Will-o'-the-Wisp. Why, however, the fairy Queen Mab should be thus introduced originated, no doubt, in her fondness of playing jokes, as alluded to by Shakespeare in the passage already quoted above from "A Midsummer Night's Dream."

According to Sir Walter Scott, the Will-o'-the-Wisp is a strolling demon or spectre, bent upon doing mischief, who once upon a time gained admittance into a monastery as a scullion and played the monks all kinds of pranks. The followers of Marmion attributed the mysterious disasters that befell them at Gifford Castle to the guidance of the assumed ecclesiastic—"The Cursed Palmer"—and expressed

the belief that it had been better for them had they been lantern-led by Friar Rush —

What else but evil could betide,
With that cursed Palmer for our guide?
Better we had through mire and bush
Been lantern-led by Friar Rush.

The wandering demon, it seems, was known in many parts of Scotland by the familiar name of "Spunkie," whose freaks and mischievous character form the subject-matter of numerous lengthened tales. Mr. Guthrie, in his "Scenes and Legends of the Vale of Strathmore" (1875, 100), tells us how "many a poor benighted wight hath this uncannie warlock driven to his wits'-end by his uncouth gambols and deceptive light, and many a bold and valiant knight hath he laid *hors de combat* on the marshy plain." Milton in his "Paradise Lost" (ix. 634), whilst explaining the philosophy of this superstitious appearance, alludes to the notion which associates it with an evil spirit in the well-known lines:—

A wandering fire,
Compact of unctuous vapour, which the night
Condenses, and the cold environs round,
Kindled through agitation to a flame,
Which oft, they say, some evil spirit attends,
Hovering and blazing with delusive light,
Misleads th' amaz'd night-wand'rer from his way
To bogs and mires, and oft through pond or pool,
There swallow'd up and lost from succour far.

In Normandy, the peasant believes that the Will-o'-the-Wisp is a cruel and malicious spirit whom it is highly dangerous to encounter. Mdlle. Bosquet, in her "Normandie Romanesque et Merveilleuse," says that it follows and persecutes any unfortunate person who runs away from it; his only chance of escape, when sore-prest, being to throw himself on his face and to invoke the Divine assistance. Hence the Feux Follet, as it is called, is a source of terror, and its weird appearance is much dreaded by old and young; many stories being told of the injury done to unwary travellers by its wicked knavery.

Again, a Danish tradition affirms that Jack-o'-Lanterns are the spirits of unrighteous men, who by a false glimmer seek to mislead the wayfarer and to decoy him into bogs and moors. The best safeguard against them, when they appear, is to turn one's cap inside out. One should never point at them, as they will come if pointed at. It is also said that if any one calls them, they will come and

light the person who called.¹ A popular belief in Sweden says that "Jack-with-the-Lantern" was formerly a mover of landmarks, and for his unjust acts is doomed to wander backwards and forwards, with a light in his hand, as if he were in search of something. Thus, he who in his lifetime has been guilty of such a crime is believed to have no peace or rest in his grave after death, but to rise every midnight, and with a lantern in his hand to proceed to the spot where in days gone by the landmark had stood which he had fraudulently removed. On reaching the place, however, he is seized, says Mr. Thorpe, with the same desire which instigated him in his lifetime when he went forth to remove his neighbour's landmark, and he says as he goes, in a harsh hoarse voice : " It is right ! it is right ! it is right !" But on his returning, qualms of conscience and anguish seize him, and he then exclaims : " It is wrong ! it is wrong ! it is wrong !" There is also a Danish tradition which informs us, that near Skovby, on the isle of Falster, there are many Jack-o'-Lanterns. They are believed to be the soul of land-measurers, who, having in their lifetime perpetrated injustice in their measurements, are doomed to run up Skovby bakke at midnight, which they measure with red hot irons, exclaiming, " Here is the clear and right boundary ! from here to there." By another curious notion the Will-o'-the-Wisps are represented to be the souls of unbaptized children. On one occasion,² a Dutch parson happening to go home to his village late one evening fell in with no less than three of these fiery phenomena. Remembering them to be the souls of unbaptized children, he solemnly stretched out his hand and pronounced the words of baptism over them. Much, however, to his consternation and surprise, in the twinkling of an eye a thousand or more of these apparitions suddenly made their appearance—no doubt all earnestly wanting to be baptized. The good man, runs the story, was so terribly frightened, that, forgetting all his kind intentions, he took to his heels and ran home as fast as his legs could take him. In Lusatia, where the same superstition prevails, these fires are supposed to be quite harmless ; and the souls of the unbaptized children to be relieved from their destined wanderings so soon as any pious hand throws a handful of consecrated ground after them.³ A Brittany piece of folk-lore is that the " Porte-brandon " appears in the form of a child bearing a torch, which he turns round like a burning wheel—occasionally setting fire to the villages which from] some inexplicable cause are suddenly wrapped in flames.

¹ Thorpe's *North-German Mythology*, 1851, ii. 211.

² Engel's *Musical Myths and Facts*, 1876, i. 207.

³ Thoms's *Notelets on Shakespeare*, 1865, 63.

According to a Netherlandish tradition,¹ because the souls of these wretched children cannot enter Heaven, they, under the form of "Jack-o'-Lanterns," take their abode in forests, and in dark and desert places, where they mourn over their bitter lot. Whenever they are fortunate enough to see any one, they run up and hasten before him, in order to show the way to some water that they may get baptized. Should no one take compassion on them, it is said that they must for ever remain without the gates of Paradise.

Among other legends connected with this subject, we may mention one current on the Continent thus recorded by Carl Engel.² On the ridge of the high Rhön, near Bischofsheim, there are two morasses, known as the red and black morass—where two villages are reported to have stood which sunk into the earth on account of the dissolute life of the inhabitants.³ On these two morasses there appear at night maidens in the shape of dazzling apparitions of light. They float and flutter over the light of their former home; but are now less frequently seen than in the olden time. A good many years ago, two or three of these fiery maidens came occasionally to the village of Wüstersachsen and mingled with the dancers at wakes. They sang with inexpressible sweetness; but they never remained beyond midnight. When their allowed time had elapsed there always came flying a white dove, which they followed. Then they went to the mountain singing, and soon vanished out of the sight of the people who followed, watching them with curiosity. A Normandy tradition says that the *ignis fatuus* is the spirit of some unhappy woman,⁴ who, as a punishment, is destined to run *la fourolle* to expiate her intrigues with a minister of the church; and on this account it is designated La Fourolle. A somewhat similiar belief once prevailed in this country, for we are told⁵ that the lights which are usually seen in churchyards and moorish places were represented by the popish clergy to be "souls come out of purgatory all in flame, to move the people to pray for their entire deliverance; by which they gulled them of much money to say mass for them, every one thinking it might be the soul of his or her deceased relations." This superstition is alluded to in the "Comical Pilgrim's Pilgrimage into Ireland" (1723, 92): "An *ignis fatuus* the silly people deem

¹ Thorpe's *North-German Mythology*, iii. 220.

² *Musical Myths and Facts*, i. 208.

³ Cf. similar tale in Hunt's *Popular Romances of the West of England*.

⁴ See Mdle. Bosquet's *Normandie Romanesque et Merveilleuse*.

⁵ *A Wonderful History of all the Storms, etc., and Lights that lead People out of their way in the Night*, 1704, 75, quoted by Brand, *Pop. Antiq.* iii. 390.

to be a soul broken out of purgatory." It is also said that the Will-o'-the-Wisp is the soul of a priest¹ who has been condemned to expiate his vows of perpetual chastity by wandering about; and Mr. Thoms says it is very probable that it is to some similar belief existing in this country at the time when he wrote that Milton alludes in "L'Allegro," when he says:—

She was pinched and pulled, she said,
And he by Friar's lanthorn led.

Once more, in Altmark, Will-o'-the-Wisps are supposed to be souls of lunatics unable to rest in their graves, and are known as "Light-men." Although they may sometimes mislead they often guide rightly, especially if a small coin be thrown them.

Such, then, are some of the principal legends and superstitions that have been connected with this strange phenomenon, the majority of which, while investing it with a supernatural origin, regard it as an object of terror; and, on this account, in our own and other countries, the peasantry still look upon it as a thing to be avoided. It was formerly thought to have something ominous in its nature, and to presage death and other misfortune. Thus, in Buckinghamshire,² a species of this phenomenon, locally known as "the wat," was said to haunt prisons. Oftentimes before the arrival of the judges at the assizes it has, we are told, been known to make its appearance like a little flame, being considered fatal to every prisoner to whom it became visible. The same dread is attached to it in Sussex, and Mrs. Latham, in her "West Sussex Superstitions,"³ tells us that in a village where she once resided the direction of its rapid undulating movement was always carefully observed, from an anxiety to ascertain where it would disappear, as it was believed to be—

The hateful messenger of heavy things,
Of death and dolour telling

to the inhabitants of the house nearest that spot. Considerable alarm was on one occasion created by a pale light being observed to move over the bed of a sick person, and, after flickering for some time in different parts of the room, to vanish through the window. It happened, however, that the mystery was soon afterwards cleared up, for, as Mrs. Latham tells us, "when reading in her room after midnight, all at once something fell upon the open page and appeared to have ignited it. She soon perceived that the light pro-

¹ Thoms's *Notelets on Shakespeare*, 65.

² Brand's *Pop. Antiq.* iii. 402.

³ *Folk Lore Record*, i. 53.

ceeded from a luminous insect, which proved to be the male glow-worm." In the same way the "Corpse candle" in Wales, also called the "fetch-light," or "dead-man's candle," is regarded as an ominous sign, and believed to be a forerunner of death. Sometimes it appears in the form of a plain tallow candle in the hand of a ghost, and at other times it looks like a "stately flambeau, stalking along unsupported, burning with a ghastly blue flame.¹" It is considered dangerous to interfere with this fatal portent; and persons who have attempted to check its course are reported to have come severely to grief; many actually being struck down where they stood as a punishment for their audacity. A Carmarthenshire tradition, recorded by Mr. Wirt Sykes, relates that one day when the coach which runs between Llandilo and Carmarthen was passing by Golden Grove, three corpse candles were observed on the surface of the water gliding down the stream which runs near the road. All the passengers saw them. A few days after, some men were about to cross the river near there, when one of them expressed his fear at venturing, as the river was flooded, and he remained behind. Thus the fatal number crossed the river—three—three corpse-candles having foretold their fate; and all were drowned. In conclusion, we would only add that Will-o'-the-Wisps have long ago happily disappeared from all marshes and lowlands as soon as drained and brought under cultivation—these "wildfires," as they have been called, preferring some supposed haunted and desolate bog for their habitation.

¹ Wirt Sikes, *British Goblins*, 139.

A SUCCESSFUL AFRICAN JOURNEY.

CENTRAL AFRICA has lately been receiving a great deal of attention, and its secrets are being rapidly made known by the various expeditions which have been sent thither during the last few years. In the work of exploration part is being taken by more than one of the European nations. Travellers, missionaries, and traders are combining to make us acquainted with these populous regions, and engaging in a friendly rivalry in opening them to civilisation and to commerce. A great impetus has been given by the King of the Belgians, at whose invitation a geographical conference was held at Brussels in September 1876. This was followed by the despatch of several expeditions under the auspices of the International African Association, and the work was soon taken up by our Royal Geographical Society. A special fund was raised, and Messrs. Keith Johnston and Joseph Thomson were selected to take command of the expedition. The former of these had already served his apprenticeship as an explorer in South America, and his companion was well qualified by his attainments as a geologist and naturalist. The funds which came in did not allow the Society to embark in a very ambitious undertaking, but a route was decided upon, the exploration of which could but add materially to our knowledge of tropical Africa. Between the east coast and the northern end of Lake Nyassa, and onwards to the Tanganyika, there was yet much untrodden ground through which there might be facilities for the formation of trade routes to those lakes, and it was this country that the travellers were instructed to explore.

Leaving England in November 1878, Johnston and Thomson arrived at Zanzibar, the starting-point for all expeditions into Eastern Africa, in the early days of 1879. A few days' delay at Aden on the way was made use of for a short exploratory trip across to Somali-land, the fruits of which were sent home in a paper entitled "Four Days in Berberah," containing, besides a general description of the place and people, some valuable observations on the geology

and physical geography of the neighbourhood. At Zanzibar preparations had to be made for the journey into the interior, and carriers engaged for the necessary impedimenta of the expedition. They had the good fortune to secure, through Bishop Steere, the services of Chuma, Livingstone's favourite attendant, as headman of their party. Then, as some weeks remained before the breaking up of the rainy season, Johnston utilised it by a visit to the mountainous country of Usambara. An interesting account of this visit was published in the "Proceedings of the Royal Geographical Society" ¹ (Sept. 1879), accompanied by some geological notes by Thomson. This country "may be taken as an epitome of all Africa. There was a little bit of arid, level, uninhabited desert, a bit of undulating, cultivated, and populous country, and beyond that a tract of mountain forest and stiff climbing. The magnitude of the trees and the density of the forest," writes Johnston, "exceeded anything I had imagined in Africa, and reminded me of Northern Paraguay, only here there is much less variety in the tree forms." The geological formations noted were the metamorphic gneiss of the inland hills, succeeded by sandstones and limestones of the carboniferous series, two old sea beaches of the tertiary period formed by successive upheavals of the African coast, and lastly, the alluvium of the Pangani river.

By the middle of May the rains had abated sufficiently to enable the travellers to make a start, and they left Zanzibar on board one of the Sultan's steamships and landed at the port of Dar-es-Salaam, a short distance to the south. Besides their large following of 150 men, they were accompanied so far by Dr. Kirk, who rendered them such help as his experience enabled him to confer. A day or two later the party set out for the interior, with the indispensable African accompaniments of shooting, blowing of horns, drumming and shouting. Proceeding first in a south-westerly direction, it passed through the broad level tract of Uzaramo, and on June 15 touched the Rufiji or Lufiji river at the village of Kimkumbi. This river appears to take a large bend to the northward from the point where Captain Elton crossed it not far from the sea, turning again at Kimkumbi slightly to the southward. Its bed was full of sand islands and banks, with snags sticking up everywhere, and it was thus ill-adapted for navigation. Although Johnston had waited some time at Zanzibar, the wet season was not yet over, and the first part

¹ In this publication Johnston's and Thomson's papers and letters on the expedition (with maps) have been from time to time published, and to them I am chiefly indebted for the information contained in this article.

of the journey was accomplished through drenching rain, the low sandy plain being but little better than a marsh. To this is probably to be attributed the unfortunate death of the leader of the expedition. Whilst on a hunting excursion in Uzaramo, Johnston got wet through, and was too intent on the search for game to take off his wet clothes. Next morning he complained of what he thought was rheumatism in the back, and dosed himself under that idea till more unmistakable symptoms convinced him that he was suffering from an attack of dysentery. Through the delay in the application of the proper remedies, the disease became so much the more difficult to remove; the onward march in the continual rains only made Johnston worse, and he soon had to be carried in a sort of hammock. He got gradually weaker, and at Behobeho, about 130 miles from Dar-es-Salaam, he died (June 28). Thus was one more added to the many brave travellers who have found a grave in African soil, and Thomson, a young man 22 years of age, was left alone in charge of the expedition. It is sad that the accomplished young traveller, who had qualified himself for the work in which he was engaged by the studies and training of his whole life, should thus have succumbed almost at the outset of his mission. The loss to geographical science is a great one, for had he lived much might have been predicted of the service he would have been sure to render in the exploration of Africa. It was well, however, that his companion was a man who would not give way to difficulties without an effort. Young as he was, and unused to the sextant and geographical work, he might well hesitate long over the question whether he ought to return or go forward. He ultimately resolved to push on, and, having performed the last sad offices for his late fellow-traveller, started on July 2. His constant attention to Johnston during his illness, coupled with the anxieties consequent on the position he was thrown into, brought on a fever which for some days rendered him very unfit for travelling.

Crossing the water-parting of the Lufiji and Kingani rivers, Burton's route was struck at Kirengue, or Kilengue,¹ where Thomson was so weak from his illness that he was obliged to rest three days. He was now approaching the country of the Wamahenge, a warlike race held in great dread by the surrounding population. One day the more forward of Thomson's porters rushed back in a scare, shouting "Wamahenge! Wamahenge!" By a display of courage and friendliness Thomson satisfied the warriors—they were returning from a fighting expedition—of his peaceful intentions, and received

¹ Whilst Burton uses the interchangeable letter *r* in preference to *l* in the native names, Thomson says he invariably heard the latter used.

on their part the assurance of their friendliness towards the white man. A fraternal compact was sealed in the characteristic African manner by Chuma drinking blood from the breast of the chief's son, who did the same from Chuma's. The vegetation beyond Kirengue became charming, quite a contrast to that passed through before Behobeho. The undulating ground had been cut by the rains of the wet season into deep narrow glens, which had become clothed with a rich tropical flora. The banks of the streams were adorned with creepers, palms, mparmusi, and other trees of varied tint and form growing in profusion. On the tops of the ridges, however, owing to the porous soil, everything green was shrivelled up, even to the trees, under the fierce sun. "A porous surface stratum in Africa has always this result; if the surface is not damp and marshy, it becomes a desert."

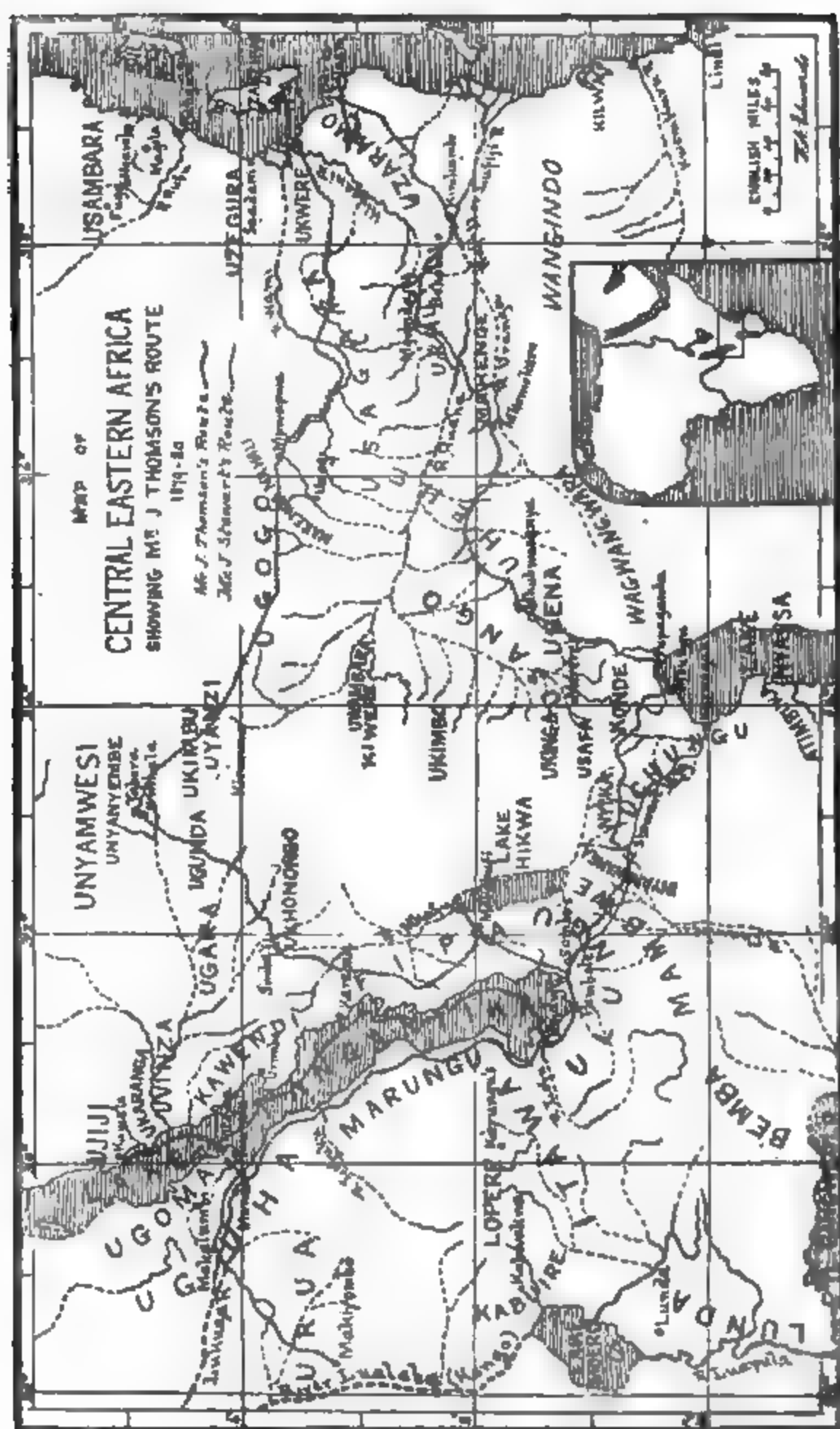
Turning to the south-west from Mgunda, the chief town of Khutu, Thomson struck the Ruaha, one of the two rivers which united form the Rufiji, in about 37° E. longitude (July 21). Its breadth was then about 150 yards, with a depth varying from two to nine feet. Rapids and rocky impediments render it utterly impracticable for canoe navigation. Here a little folding-boat, which had been carried all the way by two men, was brought into requisition, and conveyed the men and bales across the river without the damage or loss of a single article. They had now entered M'henge. On arriving at Mkomokero, the chief town, the chief would not hear of Thomson's proceeding without a delay of a few days, in order that his people might see him, no white man having been there before. Thomson took advantage of the stoppage to visit the Uranga, the river which joins the Ruaha lower down. This river was found to be very deep, and to have a slow current, and it appeared to be navigable for the largest river boats. Thomson had great difficulty in obtaining guides here, and it was only after giving the chief two barrels of gunpowder that he succeeded in getting two guides. With these he recommenced his march on August 1, but he had not proceeded many stages before they deserted, and it afterwards turned out that they did not know the rest of the way. A few marches farther brought Thomson into the Uhehe country, on the great plateau of Eastern and Central Africa. For several days he passed through a sparsely inhabited country, and had great difficulty in procuring sufficient food for his men. The Ruaha was again crossed in safety, and a south-westerly course was taken to Mkubwasanga, the town of the head chief of Uhehe.

At Mkubwasanga Thomson had reached the longitude of the northern extremity of Lake Nyassa, and from here a few marches in

a southward direction brought him to the completion of the first part of his mission. On September 22 he looked down from the edge of the elevated table land upon the waters of Nyassa, 4,000 feet below him, stretching away into the southern distance. He reached its shore at a point about six miles east of Mbungo, "without accident of any kind," as he wrote home, "and in excellent condition in all respects." The Konde or Livingstone Mountains,¹ reported by Lieutenant Young to enclose the lake at its northern end, appear to be the escarpment of the high plateau across which the latter part of Thomson's route lay. "From lat. 8° 50' S.," Thomson writes, "the country suddenly rises from an altitude of about 3,500 to 7,000 feet, and a few miles farther south to 8,000 and 9,000, representing the general level of an old plateau, now much cut up by numerous streams into narrow valleys of great depth. This height extends all the way to Lake Nyassa. No higher altitude on our route was observed, and the highest point reached was 8,116 (bar.). No conspicuous mountain was seen, and the Konde Mountains are a range I could not discover. The structure of this plateau is of soft clay-slate till near Nyassa, where the rocks become volcanic."

The travellers rested here a few days, and they then rounded the north-west corner of the lake, crossing a large stream in canoes. Thomson was here enabled to send home letters by way of Livingstonia, and then set out to reach the south end of Tanganyika. This journey does not appear to have presented any special difficulties. The route lay across the elevated plateau of that part of Africa which varies from a height of 3,300 feet above the sea in Konde, the country bordering on Nyassa, to 6,500 feet in Nyika. Lake Tanganyika was reached on November 4, and Thomson was thus able to settle the vexed question of the distance between the two lakes. This he found to be only about 250 miles, thus bringing the two great water highways within a practicable limit of communication. On Nov. 5 Thomson arrived at Pambete, a village at the southern extremity of Tanganyika which had already been visited by Livingstone and Stanley. Here, on the very afternoon of his arrival, Thomson, to his great surprise and delight, was joined by a fellow-countryman, Mr. James Stewart, C.E., of the Livingstonia Mission on Lake Nyassa, who, by a singular coincidence, had simultaneously traversed the belt of land intervening between the lakes. Stewart had reached Pambete by a route a little to the south of that taken by Thomson, and one much more favourable for portage. He started from the Kambwe Lagoon, 20 or 30 miles south-west of the point where Thomson left Nyassa, on

¹ See *Gentleman's Magazine*, October 1877, article "Livingstonia,"



Oct. 14, and reached the shore of Tanganyika, at the extremity of its most easterly bay, on November 4, thus completing the journey in a shorter time than Thomson. He describes his route as very practicable for the construction of a road. The highest elevation reached was 5,400 feet as Tanganyika was approached, but the rise was gradual, and throughout the whole of the route there was not one difficult ascent. The distance from lake to lake was found to be 243 miles, Pambete being 11 miles farther. The climate is described as cool and bracing ; the rainfall is large, and water plentiful even in the dry weather. Cattle were found in almost every village—an evidence of the absence of the destructive tsetse fly, and sheep and goats were kept in large numbers. Whilst the two travellers were together, observations were taken to settle the longitude of Pambete, which has an important bearing on our present geographical knowledge of this portion of inner Africa. Both travellers agree as to the evidence of a periodical rise of the water of Lake Tanganyika.

Thomson had now completed the task which had been set him, but now that he was on Tanganyika he was overcome by a desire to see somewhat more of it, and especially to visit the Lukuga River and solve the mystery about the outlet of the lake. So, instead of at once returning, he decided on a journey around the western shore of the lake. All accounts agreed that it would be quite impossible for him to take his caravan along this route, owing to the difficulties of the mountains ; but this was no obstacle to his project. Leaving Pambete on November 10, the same day as Stewart departed on his return journey to Nyassa, he found at Iendwe, near the mouth of the Lofu River, a suitable place to leave his men encamped during his absence. Then leaving Chuma in charge, he started on his march, taking only thirty porters and a supply of absolute necessities. They walked along the edge of the lake where they were able to do so, and frequently had splendid views of the opposite shore, which, thirty miles off, stood out as sharply and as well defined as if only a few miles away, revealing every notch and valley with their varied tints and shades. North of the Lofu River he had to pass through Itawa, at the capital of which an unpleasant incident occurred that fortunately, however, did not lead to any serious consequences. Thomson entered the town in advance of his men, and was surprised to find the male population in a state of great excitement ; whilst he was inside taking shelter from the rain, they barricaded the gate and prevented his men from coming in. Thomson put a good face on the matter, and after some trouble got outside. He then sent messengers to the chief, inquiring the meaning of such a strange

reception, and by dint of considerable negotiation succeeded in bringing the affair to an amicable conclusion. The action of the natives was, it appears, instigated by motives of fear and self-protection. They had some time previously experienced treacherous conduct on the part of an Arab, who, introducing himself in a friendly way into the town, took possession of it. To prevent a recurrence of such treacherous conduct, no caravan had since been allowed to enter without first sending due notice. A large present did not suffice to put the chief in a good humour, and it was with difficulty that a guide was obtained to take the party farther on its onward march.

The physical difficulties of the route proved very great, exceeding any that had been encountered all the way from Dar-es-Salaam. There was not a mile of level ground, but hills followed hills, all of the most precipitous nature, varied only here and there by some lower ridge. Seldom was camp reached until long after midday, though they started with the sun in the morning ; the portable boat, which had been brought in expectation of meeting with unfordable streams, proved itself an intolerable burden, and more than once Thomson was only dissuaded from destroying it by the entreaties of the men themselves. The population beyond Itawa was very sparse, and the natives met with were generally unfriendly, though Thomson's tact and temper almost always succeeded in obtaining their hospitality. The troubles and difficulties of the march, however, at last brought their reward. On Christmas day Thomson saw the Lukuga " as a noble river flowing with rapid movement and whirling eddy away to the far west, unchecked by sandbars or papyrus, and requiring no experiments with straws or other objects to ascertain the existence of a current." This Lukuga river had been first seen by Commander Cameron, who in 1874 made a voyage from Ujiji round the southern portion of the lake with the object of ascertaining its outlet. He found the entrance more than a mile across, but closed by a grass-grown sandbank, with the exception of a channel 300 or 400 yards wide, across which there was a sill where the surf broke heavily at times, although there was more than a fathom of water over its shallowest part. The next day he followed the river for three or four miles, until navigation was found to be impossible in consequence of the masses of floating vegetation. The current was flowing from the lake. This seemed to settle the question until Stanley in 1876 sent home the puzzling report of his visit to the river. Stanley went a considerable distance beyond Cameron's farthest point, and he very decidedly states that the Lukuga is not an outlet but an affluent of the lake. The current then was exceed-

ingly slight, for it required some ingenious experiments on Stanley's part to satisfy him that the current was towards the lake. He has formulated a curious theory to the effect that the bed of the lake, which had been formed by some great earthquake, was not yet filled with water, that it would very soon begin to overflow, and that some traveller coming after might find the barrier in the Lukuga broken down and the water of the lake emptying itself through it into the Lualaba. Another contribution towards the solution of this problem has been made by Mr. E. C. Hore, of the London Missionary Society's Mission at Ujiji, who visited the Lukuga about seven or eight months before Thomson reached it. He found the river to have an outward flow, with a rapid current, and remarks: "As the river narrowed we found ourselves rapidly swept in (one requires to be rather lively here), and made the boat fast alongside, about one mile inside." At Stanley's farthest point the rapids were found to be too dangerous to venture farther with the canoe, so with a couple of natives Mr. Hore walked on to the Kiyanja ridge, from the top of which he saw the Lukuga "flowing far into Urua."

Thomson therefore found himself forestalled in the solution of the Lukuga mystery. His experience was very similar to that of Mr. Hore. Obtaining a canoe at a village called Manda, he proceeded to examine the barrier laid down in Stanley's map. The current was so strong that he had to keep close to the side, and at one or two places where the river narrowed it was with the greatest difficulty that the canoe could be kept in command. At the place where Stanley found a barrier the river, narrowed to about half its breadth, now rushed through "with all the force and noise of a mountain torrent, utterly impassable for canoe or boat of any description." The following day Thomson returned and was hospitably received at Kasenge by the missionaries of the London Missionary Society's Station. He then paid a short visit to Ujiji on the east side of the lake, where a similar reception awaited him, preparatory to a more extended examination of the Lukuga, from which he intended returning to Iendwe by way of Kabuire. In this undertaking, however, the young traveller was foiled by insuperable obstacles. From the very first he had great difficulties with his men, as they believed he was taking them to Manyuema, where they would be eaten up. They tried every means in their power to throw obstacles in his way and retard his movements, two of them deserting near Meketo, and the others threatening to do the same. For six days he continued his course along the Lukuga in spite of these obstacles, but he was then obliged to give in. The Lual

tion to that place, and then about west into the great westerly bend of the Congo, all the way through a most charming valley, with hills rising from 600 to 2,000 feet in height above the lake. The current is extremely rapid, and quite unnavigable for boats or canoes of any description, owing to the rapids and rocks."

"From Makalumbi," he writes in a letter to Dr. Kirk, "I crossed the Lukuga into Urua, and struck south-west for the town of Kiyombo, who is the chief of all the Warua on the eastern side of the Congo. I found, however, I had only escaped from difficulties with my men to fall into ten times worse ones with the Warua. They turned out to be the most outrageous scoundrels and thieves I had yet met. It is utterly impossible to convey to you the miserable life we led during the five weeks we were in their country. They had not the slightest acquaintance with traders, and they had no respect for the white man. The chiefs demanded exorbitant Mhongo, and made us stop wherever they took the fancy; the people were by no means loth to help themselves by tearing the clothes off the backs of the men, even in crowds. Several times they turned out to fight us. Arrows and spears have been aimed at me within a few feet. For rudeness and insolence they are unparalleled. They would come and tear open my tent-door to look at me, until I had to give it up altogether. They generally became worst at night, besieging us in our huts; and several times we had to sit up all night, with howling hundreds around us ready to fight or fly. At one village a crowd had got hold of one of my men, and I only forced my way in just in time to deflect a descending axe which would have ended his days. And yet we had to show ourselves firm as well as pacific. The slightest accident or blood drawn, and not a soul of us would have escaped. They seemed just to thirst for our blood, but still they were afraid to attack us in case Kiyombo might be displeased.

"At last we reached the big chief's, and within about ten days of Iendwe, and there, after being kept a week, we were informed, to our immense disappointment, that we could not be allowed to pass, as they were at war with the country in front, and, to make matters worse, we were further directed to return exactly the same way we came. And back we had to go; and what a time we had of it! How we ever escaped with our lives I cannot comprehend. Imagine being awakened in the dead of night in your tent by your blanket being torn from under you, just in time to catch hold of your azimuth compass, and to find your watch gone. Such was one of my night's adventures. Fortunately, they got frightened at the watch, and the chief brought it back next day. The chief took an immense fancy for

all my personal articles—clothes, cups, blankets, &c., and would have left me with only what I had on my back if I had not had a few things hidden away. To have seen me in camp you would have thought I had not an article but a bare tent and a blanketless camp-bedstead."

It was not without an intense feeling of delight and relief that the Lukuga was crossed once more. At Mtowa, the L.M.S. station on the western side of Tanganyika, he learnt that Mr. Hore was expected every day on his way by canoe to the south end of the lake. So he dismissed a large number of his native followers direct to Zanzibar and awaited Mr. Hore's arrival. Then, on March 23, 1880, they started together, and three days later landed at Karema, on the eastern side of the lake, where a station had been established by the Belgian International Association. Here they were joyously hailed by Captain Carter, who awaited them on the shore. With him they went over to pay a visit to the mission, the Indian elephant which had been brought up from the coast being ready to take them across the marsh. According to Thomson's account this locality appears to have been by no means well chosen—"a wide expanse of marsh, a small village, no shelter for boats, only shallow water dotted with stumps of trees, no food to be got and natives hostile, far from any line of trade." In that out-of-the-way part of the wilds of Africa the gathering of civilised men was a singular one. "At table there sat down an Englishman, an Irishman, a Scotchman, a Frenchman, a Belgian, and a German, representing five expeditions; and you will doubtless be pleased to learn," Thomson writes, with pardonable pride, in the letter already quoted, "that of all these (thanks to yourself), the Scotchman, though the smallest, and having to travel through entirely new country, has been the most successful of all. During the meal we were transported back to the streets of London on being favoured with a few operatic selections by Debaize's 1,200 franc hurdy-gurdy. 'Thereafter each one ransacked his memory and imagination—especially the latter—in producing the most wonderful adventures with the wild animal or the savage native. As evening approached, the elephant once more made her salaams to us, and mounting her back we bade adieu to the Belgians, and returned greatly impressed with such a curious meeting in such an out-of-the-way place." The sad death of two of the members of the Belgian mission, Captain Carter and Mr. Cadenhead, within three months of this pleasant meeting, will be remembered. They were killed in an attack made by Mirambo, the powerful chief of Unyamuesi, on the village of Mpimbwe, where they were delayed whilst on a journey to the coast. No blame appears to attach to Mirambo for this

unfortunate occurrence, for the chief was not aware of the presence of the white men in the village when he commenced the assault, being himself in the rear of his troops ; and when he was made acquainted with the fact, it was too late.

After leaving Karema Thomson and Hore had a moderately good voyage across the lake to Iendwe, where everything was found in good order and the men in good health. Thomson had intended returning to the coast from here by way of Kilwa, so as to open up more unknown ground, but he now found that this route was impassable. Merere, chief of the Urori, had recommenced his war with the Wahehe, and to pass from the one country to the other would be impossible. So he had to give that up, and to turn his face towards the well-known caravan route between Zanzibar and Ujiji. Still, the return march from Iendwe has not proved valueless. Passing round the south end of Tanganyika, along the shore, as far as the mouth of the Kilambo (Livingstone's Kalambo and Cameron's Kirumbwe), then striking about NNE. through Ulungu and Fipa, he reached, by easy ascents, the town of Kapufi, situated in lat. 8° S. and long. $32^{\circ}25'$ E. While at this place he had the good fortune to settle another of the moot points of Central African geography. For several years an unvisited lake has been figured in varied forms on our maps to the eastward of the southern portion of Tanganyika. This lake, Likwa, Hikwa, or Rukwa, as it has variously been called, was known only from hearsay. Thomson is the first traveller to speak of it from actual observation. He saw only a part of it, but from what he could gather, "it appears to be from 60 to 70 miles in length, and 15 to 20 in breadth. It lies two days east of Makapufi, in a deep depression of the Lambalamfipa mountains. A large river called the Mkafu, which rises in Kawendi, and which by its tributaries drains the greater part of Khonongo and Fipa and all Mpimbwe, falls into it. "I can almost say with certainty," Thomson writes, "that it has no outlet, certainly not any towards the west."

The main caravan route to Tanganyika was struck at Kwihala (Kwihara), in Unyanyembe, the 300 miles from Iendwe having been accomplished in 30 days—quick work for African travel. As it was, Thomson and several of his men suffered in consequence from sore feet, and had to take a few days' rest at Unyanyembe. Then, says Thomson, "we recommenced our march and joyously pushed on for the coast. Going from 20 to 30 miles a day, we soon crossed the Mgunda Mkhali, 'the Fiery Field,' passed unmolested through Ugogo, heeded not the burning heats and hard marches of the Marenga and D'Almeida through and stony paths through the Usagara moun-

tains, till at last, after a march of unprecedented speed, we sighted the Indian Ocean, and, reaching Bagamoyo, entered it with all the pomp of bloodless victory—not careworn and haggard, nor decimated by disease and hunger, but in the best of health and condition; and there stood my gallant band of followers, proud of their achievements, and thanking God they were not like other caravan porters who steal and plunder from their masters and desert them at the hour of need. I felt it to be my proudest boast that of that band of 150 men which left Dar-es-Salaam, only one did not survive to see the Indian Ocean again; and it will ever be a pleasure to me to think that, though often placed in critical positions, I never once required to fire a gun for either offensive or defensive purposes.”

This is the sort of man that is required to “open up” the Dark Continent. His conduct stands in pleasing contrast to the filibustering work of Stanley; and it cannot be said of the energetic young Scotchman that, instead of opening the door to civilisation and trade, he has made it more difficult for those who come after. His proud boast that only one of his porters had died during the march is a much nobler one than the American traveller’s tale of the number of natives that his elephant rifle was able to bring down. With the exception of the early death of the accomplished companion with whom he commenced the journey, Thomson’s expedition has been a remarkably successful one. In the comparatively short time he was on African soil—scarcely 14 months—he has accomplished excellent work, and it is greatly to his credit that, in spite of the unfortunate loss of the leader of the expedition, he allowed nothing to daunt him, and that his own youth and inexperience were not allowed to stand in the way of the successful accomplishment of his undertaking. He is, indeed, a worthy follower of Burton and Speke, Livingstone and Cameron. His arduous work in the conduct of his caravan did not allow him much opportunity of bringing home any extensive collections in natural history, but he was still able to gather a few plants and shells by the wayside, which will doubtless prove both interesting and valuable. Whether the route by which he reached the lakes is likely to prove of service as a commercial highway to the regions which border on those inland waters is doubtful, especially with regard to Nyassa. It would appear that from the countries round Nyassa the most practicable outlet would be by way of the Shire and Zambesi rivers,¹ where a short land portage of about 70 miles only intervenes to prevent a complete waterway to the outer world. Probably this route also may be used

¹ See map in *Gentleman’s Magazine*, October, 1877, article “Livingstonia.”

to reach the southern portion of Tanganyika, where a comparatively easy road, shortened probably to about 210 miles, can be made to unite the two lakes. But however this may be, Joseph Thomson has added materially to our knowledge of the regions he has passed through so honourably and so successfully, and his journey cannot be denied a place amongst successful African expeditions.

FREDERICK A. EDWARDS.

THOMAS CARLYLE.

THOMAS CARLYLE, who died full of years and of honours on Saturday morning, February 5, at the house in Cheyne-row, Chelsea, where he had resided for nearly forty-seven years, was born at Ecclefechan, in Dumfriesshire, on Tuesday, December 4, 1795, and had consequently overpassed by fully two months the ripe age of eighty-five years on the day of his death.

Carlyle's father was a master mason at Ecclefechan ; a man of simple, thrifty, and pious life, of great force of character, robust habit of mind, and natural wit and shrewdness.

After a course of study at Edinburgh University, Carlyle, scrupling to enter the ministry, as his father had at first desired, was appointed to the conduct of a school at Kirkcaldy in Fifeshire, where his college friend Edward Irving was already established, and where he remained from 1816 to 1818. His friendship with Irving, commenced at the University (and one of the most memorable influences of his earlier life), was here consolidated.

A parallel might be drawn between Carlyle at Kirkcaldy and Johnson at Edial, though to the advantage of the former ; for it seems, from all credible tradition and report, that Carlyle, who was by no means sparing of the rod, had, before he left, quite reinstated the Burgh School to its old position, from which it had sadly dwindled and fallen through the incompetence and imbecility of a former master. In 1818 Edward Irving instituted at Edinburgh a small society, consisting only of seven or eight members, called the Philosophical Association, of whom he himself was one and Thomas Carlyle another. Some teachers of local eminence and licentiates of the Church made up the number. But the Philosophical Association is defunct ; and the early sentiments of Carlyle and Irving are as entirely lost as are those of their less distinguished colleagues. "Carlyle," writes Irving to a friend in 1819, "goes away to-morrow. . . . It is very odd, indeed, that he should be sent for want of employment to the country ; of course, like every man of talent, he has gathered around this Patmos many a splendid purpose to be fulfilled, and much improvement to be wrought out : 'I have the

ends of my thoughts to bring together, which no one can do in this thoughtless scene. I have my views of life to reform, and the whole plan of my conduct to new-model ; and I have my health to recover. And then once more I shall venture my bark upon the waters of this realm, and if she cannot weather it, I shall steer west, and try the waters of another world.' So he reasons and resolves ; but surely a worthier destiny awaits him than voluntary exile."¹ The earliest known authorship of Mr. Carlyle was in 1820 and the three following years, when he contributed sixteen articles to "Brewster's Edinburgh Encyclopædia," including papers on Lady Mary Wortley Montagu, Montaigne, Montesquieu, Montfaucon, Dr. Moore, Sir John Moore, Necker, Nelson, Netherlands, Newfoundland, Norfolk, Northamptonshire, Northumberland, Mungo Park, and on the elder and younger Pitt. During this period he also contributed two papers, one on Joanna Baillie's "Metrical Legends," and the other on Goethe's "Faust," to the *New Edinburgh Review*, a brief-lived quarterly which commenced its career in July 1821, and ceased to exist with the completion of its fourth volume in April 1823. In 1822 Carlyle executed a translation from the French (not published till two years later) of Legendre's "Elements of Geometry," and I recollect his telling me in December 1868, with some evident pride and pleasure in the thought, that he considered the Introductory Chapter on Proportion, prefixed to that book, to be still the clearest and best exposition of the subject that had yet appeared—a remark partly confirmed by so excellent an authority as the late Mr. De Morgan.

More congenial work, however, he must have considered the account of "Schiller's Life and Writings," contributed to the *London Magazine* (then in the hey-day of its glory, with a most brilliant roll-call of contributors) partly in 1823 and partly in 1824. It was separately published as a volume in 1825, and may be considered as Carlyle's first original work. Like his earlier contributions to the "Encyclopædia," it bears hardly any traces of his later style. Many years afterwards (so recently as 1872) he added to it for the first time in the Popular Edition a beautiful supplement (outweighing tenfold in value the original work) relating to Schiller's sisters, and of which the particulars were derived from a then newly published book by a certain Herr Saupe.

In 1823 Carlyle accepted the post of tutor to Mr. Charles Buller, and from this connexion there sprang a life-long friendship. When Buller's brief and brilliant career was terminated by death in 1848, Carlyle wrote a beautiful tribute to his memory, which appeared in the *Examiner*—in which journal and in the *Spectator*, earlier in the same

¹ Mrs. Oliphant's *Life of Edward Irving* (Lond. 1862), vol. i. pp. 90, 91.

year, appeared all I have been able hitherto to trace of his fugitive political contributions to journalism. These consisted of a paper on the fall of Louis Philippe, and of a series of papers on Irish questions, which he once told me were reprinted by Childs of Bungay as halfpenny pamphlets for distribution ; though I have never yet met with them in that form. He, however, added that these "newspaper things" (as he contemptuously called them) were "but a fraction (*proper* fraction, perhaps) of the large mass which lies safe in the whale's belly still !"

But I am anticipating. I return to the time when his temporary tutorship to Charles Buller ceased, and when he returned to Edinburgh. From 1824 to 1827 Carlyle was mainly occupied with translations from Goethe and other modern German romance-writers. His translation of "Wilhelm Meisters Lehrjahre" (or Apprenticeship) appeared at Edinburgh in three volumes in the former year, and first made that great masterpiece of Goethe known to English readers. It was followed in 1827 by a work in four volumes, entitled "German Romance : Specimens of its Chief Authors, with Biographical and Critical Notices." The fourth volume consisted of a translation of "Wilhelm Meisters Wanderjahre," then newly published. The "Biographical and Critical Notices" are included in Carlyle's collected Works, as are also the translations from Tieck, Musäus, and Richter ; but the specimens from Hoffmann and La Motte Fouqué have never been reprinted since their first appearance—being left, to use Carlyle's expressive phrase respecting them thirty years later, "afloat or stranded, as waste driftwood, to those whom they may farther concern"—and they give a special interest and value to the original edition of "German Romance," which is not now easily procurable.

In the mean time, in 1826, Carlyle had taken to himself a wife in the person of a former pupil of his friend Irving—Miss Jane Welsh, the daughter of Dr. Welsh of Haddington, a lineal descendant of John Welsh of Kirkcudbright, the son-in-law of John Knox the Reformer. She proved worthy (as it fortunately happened) to be the wife and helpmate of such a man, and after forty years of married life, when she was "suddenly snatched away from him," in April 1866, during his absence in Scotland, he was able not only to pay a tribute to her "clearness of discernment and noble loyalty of heart," but emphatically to add his testimony that for "forty years she was the true and loving helpmate of her husband, and by act and word unweariedly forwarded him, as none else could, in all of worthy that he did or attempted." Of how few of the wives of our greatest men of letters could the like words be used with any approach to propriety or truth !

Carlyle settled with his wife at the lonely farm of Craigenputtoch, which he has described so graphically in one of his letters to Goethe. It was fifteen miles to the north-west of Dumfries, among the granite hills and the black morasses which stretch westwards through Galloway, almost to the Irish Sea. "In this wilderness of heath and rock," he writes to the great German poet, "our estate stands forth a green oasis—a tract of ploughed, partly enclosed and planted ground, where corn ripens and trees afford a shade, although surrounded by sea-mews and rough-woolled sheep. Here, with no small effort, have we built and furnished a neat, substantial mansion; here, in the absence of a professional or other office, we live to cultivate literature with diligence, and in our own peculiar way. Two ponies, which carry us everywhere, and the mountain air, are the best medicines for weak nerves. This daily exercise is my only dissipation; for this nook of ours is the loneliest in Britain—six miles removed from every one who in any case might visit me."

Here in 1831 his first great original work, "Sartor Resartus," was written; but it was long before a publisher could be found for it. At last, in 1833–1834, it did come out gradually, piecemeal, in the pages of *Fraser's Magazine*, to which Carlyle had by that time become a frequent contributor; but it was not until 1838, seven years after its composition, that it appeared in England as a separate book. It was during these years of seclusion at Craigenputtoch that the brilliant series of essays contributed to the *Edinburgh, Westminster*, and *Foreign Reviews* were also mainly produced.

In the early days of 1832, during his temporary absence in London, on a memorable visit respecting this very business of finding a publisher for "Sartor," Carlyle lost his father, who had attained the ripe age of seventy-four. Carlyle's allusions to him in after life were always couched in terms of the most affectionate reverence; and his lament, while the grief was still a fresh one, is expressed with a tenderness, a force, and a simplicity perhaps never surpassed. "The venerated friend," he writes to Mr. Macvey Napier, under date London, February 6, 1832, "that bade me farewell cannot welcome me when I come back. *I have now no father in this land of shadows.*" The only lament over a beloved father by a distinguished son at all comparable to this for its infinite pathos and tenderness is perhaps the closing stanza of Mr. Swinburne's *Inferiae*.¹

In 1833 the lonely scholar was visited in his seclusion by a hardly less notable American writer. In his *English Traits* Mr. Emerson has given a graphic record of this memorable meeting and

¹ *Poems and Ballads*, Second Series, p. 109.

of the conversation that took place. A life-long friendship sprang up between these two remarkable men, thus strangely brought together in that remote part of our island; and when in 1841 Emerson's "Essays" were brought out in an English edition, Carlyle wrote an introductory preface to them, which is one of the most important of his minor and scattered writings.

It was in the following year (1834) that Carlyle finally and permanently settled himself in London, and fixed his abode at the house in Chelsea where he continued to reside until his death. "We have broken up our old settlement," he writes to Sir William Hamilton (dating his letter 5 Great Cheyne Row, Chelsea, 8th July, 1834), "and, after tumult enough, formed a new one here, under the most opposite conditions. From the ever-silent whinstones of Nithsdale to the mud-rattling pavements of Piccadilly there is but a step. I feel it the strangest transition, but one uses himself to all. . . . The house pleases us much; it is in the remnant of genuine *old* Dutch-looking Chelsea; looks out mainly into trees. We might see, at half a mile's distance, Bolingbroke's Battersea, could shoot a gun into Smollett's old house, where he wrote 'Count Fathom,' and was wont every Saturday to dine a company of hungry authors, and then set them fighting together. Don Saltero's coffee-house still looks as brisk as in Steele's time; Nell Gwynn's boudoir, still bearing her name, has become a gin-temple, not inappropriately; in fine, Erasmus lodged with More (they say) in a spot not five hundred yards from this. We are encompassed with a cloud of witnesses, good, bad, indifferent."

Here he wrote the brilliant succession of works which have made his name world-famous: "The French Revolution" (1837), "Chartism" (1840), "Past and Present" (1843), "Oliver Cromwell's Letters and Speeches with Elucidations" (1845), "Latter Day Pamphlets" (1850), "Life of John Sterling" (1851), and last, but not least, the "History of Frederick the Great" (1858-65).

In the "Life of John Sterling," which, if it does not outlive his more laboured historical works, will doubtless have tenfold the number of readers, he has embalmed the memory and the name of one who, with all his graces and gifts, would ere now have been otherwise forgotten. Sterling's novel of "Arthur Coningsby," his tragedy of "Strafford," and his two volumes of verse, have ceased to be read by any but a few literary students and specialists here and there, but he lives in Carlyle's book (perhaps on the whole the most loving record ever written by one man of another, unless we except "In Memoriam") for many generations to come.

For four successive seasons, commencing 1837 and ending 1840, Carlyle appeared as a lecturer, and delivered four different courses of lectures to various London audiences. The first course, in the summer of 1837, consisted of a series of six lectures on "German Literature" delivered at Willis's Rooms. The second course was a series of twelve lectures "On the History of Literature, or the Successive Periods of European Culture," delivered in April, May, and June of 1838 at the lecture-room, 17 Edward Street, Portman Square. The third course, delivered in 1839, was on "The Revolutions of Modern Europe," and the fourth and last, "On Heroes, Hero Worship, and the Heroic in History," was delivered in 1840. The last-named course alone has been published, and after that Carlyle never appeared again as a lecturer.

His only other public appearances as a speaker were very few and far between. The first was at a public banquet given to Allan Cunningham at Dumfries in the summer of 1831. There Carlyle made a genial speech in praise of his friend and fellow-countryman, duly reported in the Scottish newspapers of the time, and reproduced by the Rev. David Hogg in his recent Life of Allan Cunningham. At a meeting held at the Freemasons' Tavern on June 24, 1840, with the view of founding the "London Library," with which his name has since been so honourably associated, Carlyle made a forcible and somewhat lengthy speech, a full record of which will be found in the following number of the *Examiner*. His next and most notable appearance was as Lord Rector of the University of Edinburgh, when he delivered his memorable address to the students on April 2, 1866. It was while absent in Scotland on this mission that his wife—the faithful companion of forty years—whom he had left behind at Chelsea, was "suddenly snatched away from him." For some time he was quite stunned by the unexpected blow, but he rallied after a while and took heart and courage for further efforts of usefulness in his time and place, and survived her for nearly fifteen years, although "the light of his life," as he pathetically wrote, "was as if gone out." In spite of this overwhelming calamity, Carlyle, "though much averse at any time, and at this time in particular, to figure on committees, or run into public noises without call," felt it to be his duty as a British citizen not only to join the committee for the defence of Governor Eyre, when the celebrated Jamaica business made so much stir in August 1866, and to write an eloquent letter on his behalf, but also to preside and speak at the meetings of the Committee held in that and the following month. These were his last public appearances as a speaker. With all his unceasing act-

for more than half a century (as long as health and strength remained) as a writer of books, he was also one of the most prolific, and certainly one of the best and most graphic of letter-writers. Scores of admirable letters of his, full of humour, wisdom, and pathos—addressed to Thomas De Quincey, Professor Wilson, Mr. Macvey Napier, Sir William Hamilton, Thomas Aird, Dr. Chalmers, Walter Savage Landor, Charles Dickens, Barry Cornwall, Thomas Cooper, Sydney Dobell, William Henry Brookfield, Alexander Gilchrist, Sir William Napier, Robert Story, Sir George Sinclair, Henry Fothergill Chorley, Thomas Erskine of Linlathen, and others—lie buried in the memoirs of those worthies, and hundreds of others that have never yet seen the light still exist, addressed to famous persons and to persons unknown to fame, to the dead and to the living. Emerson told Mr. Searle in 1848 that he had long been in correspondence with Carlyle, and that he had some letters from him which would prove of the very highest importance hereafter.¹ I have been informed too, on excellent authority, that our greatest living writer on art, who for the last twenty years has been an ardent disciple of Carlyle, and has sat at his feet as a Gamaliel, maintained for several years a constant correspondence with him, which has, without doubt, been preserved. Should a general collection of such letters ever be made public, as in the case of Charles Dickens, it will be a book of priceless value and of unusually great and varied interest. It is a curious circumstance, and characteristic of the deep and noble humanity of his nature, that among the most beautiful of these scattered letters that have hitherto come to light are the letters of condolence and sympathy on the death of some dear and loved one, both before and after the solemn event that darkened and saddened the last fourteen years of his pilgrimage. His kindness in clearing the difficulties and solving the doubts of correspondents entirely unknown either to him or to fame, and in extending to them a prompt and appropriate word of advice, encouragement, warning, or sympathy (whenever he had reason to believe their communications were frankly, loyally, and genuinely made), was boundless. The present writer has a lively and grateful recollection of the first letter he received from him, after years of silent admiration and reverence from afar off; of the visit which he afterwards made, by express invitation and appointment, to the well-known house in Cheyne Row, of the kind and gracious reception he met with, and the deep joy and gratitude that dwelt in his heart for a long time afterwards, like that of a lover accepted after long delays. The letter was in acknow-

¹ *Emerson; his Life and Writings*, by January Searle (Lond. 1855), p. 47.

ledgment of the twin volumes of William Blake's "Songs of Innocence" and "Poetical Sketches," then recently published by the late Basil Montagu Pickering, and the editing of which formed almost his first literary work of any permanent importance. "I have received," wrote Carlyle (under date December 1, 1868), "your pretty pair of Blake volumes, towards which you have done surely the part of a faithful editor. I feel much obliged by that and by many other proofs of your constant goodwill to me. . . . Thursday afternoon, about 3 P.M., if you appear here, I shall be going out to walk ; will take you with me a part of the way, and hear what you have to say about all that" (referring to a matter of some importance, then, to myself, on which I had consulted him).

Never shall I forget that memorable Thursday afternoon, or the many other mornings, afternoons, and nights that followed during the next five years when I was privileged to walk with him and to hear his wonderful talk. And when through his failing health and strength this inestimable intercourse had to grow less frequent and gradually to cease, I "felt a want unknown before." Nor can I suppose that my experiences in this respect are unique or even peculiar. In addition to the hundreds and thousands of his distant readers and disciples in Britain, in America, in our colonies, and throughout the world, there must have been scores who during the long years of his London sojourn enjoyed the added charm of his personal presence and speech. His talk was indeed a marvel. It ranged over every subject and flowed on mostly in a quiet stream of mild wisdom, sometimes irradiated by flashes of humour and pauses of laughter (for he was a hearty and vigorous laughter), and sometimes bursting into stormy indignation at the madness and folly of the time.

There is one night which is deeply burnt into my memory, when as I parted with him at his door, under the solemn stars, there came from him, as I was departing and as he mounted his steps, a final admonition pronounced in tones of awful adjuration that now seem to reverberate from the grave : "Work, now while it is called to-day, for the *night* cometh wherein no man can work."

It was this deep and abiding sense of the earnestness and seriousness of human existence which constituted the most remarkable feature in his character, and which gives so sublime a pathos to the sacred and solemn utterance, "written as if in star-fire and immortal tears," some three or four years ago, when he felt that for him the supreme and inevitable hour must be drawing nigh, and which thrilled all who heard it when Dean Stanley first made it

public in the pulpit of Westminster Abbey on the day following his death.

“ ‘ Life is a serious thing,’ as Schiller says,” he writes, quoting the motto to his own book “ Past and Present ” in sending a copy of it to Thomas Cooper, “ and as you yourself practically know. These are the words of a serious man about it.” This deeply rooted and ever-present conviction explained much of the contempt for modern verse which he was never tired of proclaiming and reiterating in his published writings, in his letters, and in his conversation.

Of the earlier portraits of him, three are specially interesting : first, the full-length sketch by “ Croquis ” (Daniel Maclise) which formed one of the *Fraser* Gallery of portraits, and was published in the magazine in June 1833. The original sketch of this is now deposited in the Forster Collection at South Kensington. The next is a sketch by Count D’Orsay, published by Mitchell in 1839. The third, which was the great author’s own favourite among the early portraits, is a sketch by Samuel Lawrence, engraved in Horne’s “ New Spirit of the Age,” published in 1844. Since the art of photography came into vogue, a series of photographs of various degrees of merit and success have been executed by Messrs. Elliott and Fry, and by Watkins. The late Mrs. Cameron also produced a photograph of him in her peculiar style, but it was not so effective or successful as her fine portrait of Tennyson. An oil-painting by Mr. Watts exhibited some fifteen years ago, and now also forming part of the Forster Collection at South Kensington, is remarkable for its weird wildness ; but it gave great displeasure to the old philosopher himself—a displeasure which I once heard him express in no measured terms. More lately, we have a remarkable portrait by Legros and an admirable one by Mr. Whistler, who has seized the *tout ensemble* of his illustrious sitter’s character and costume in a wonderful manner. The *terra cotta* statue by Mr. Boehm, exhibited at the Royal Academy in 1875, has received such merited meed of enthusiastic praise from Mr. Ruskin that it needs no added praise of ours. It has been excellently photographed from two points of view by Mr. Hedderly of Chelsea.

One of the best and most effective of the many likenesses of Mr. Carlyle that appeared during the last decade of his life was a sketch by Mrs. Allingham—a picture as well as a portrait—representing the venerable philosopher in a long and picturesque dressing-gown, seated on a chair and poring over a folio, in the garden at the back of the quaint old house at Chelsea, which will henceforth, as long as

it stands, be associated with his memory. Beside him on the grass lies a long clay pipe (a churchwarden) which he has been smoking in the sweet morning air. So that altogether, as far as pictorial, graphic, and photographic art can go, the features, form, and bodily semblance of Carlyle will be as well known to future generations as they are to ourselves. And this, in his opinion (that is, the preserving of the features of the noble, the wise, the brave, and the good), was the only worthy and proper function of the painter's art. All the rest he looked on as mere dilettantism.

The impression of his brilliant and eloquent talk, though it will probably remain, for at least half a century to come, more or less vivid to some of those of the new generation who were privileged to hear it, will, of course, gradually fade away. But it seems hardly probable that the rich legacy of his long roll of writings—historical, biographical, critical—can be regarded as other than a permanent one in which each succeeding generation will find fresh delight and instruction. The series of vivid pictures he has left behind in his “French Revolution,” in his “Cromwell,” in his “Frederick,” can hardly become obsolete or cease to be attractive ; nor is such power of word-painting likely soon to be equalled or ever to be surpassed. The salt of humour that savours nearly all he wrote (that lambent humour that lightens and plays over the grimmest and sternest of his pages) will also serve to keep his writings fresh and readable. Many of his *dicta* and opinions will doubtless be more and more called in question, especially in those of his works which are more directly of a didactic than a narrative character, and in regard to subjects which he was by habit, by mental constitution, and by that prejudice from which the greatest can never wholly free themselves, incapable of judging—such, for instance, as the scope and functions of painting and the fine arts generally, the value of modern poetry, or the working of Constitutional and Parliamentary institutions.

RICHARD HERNE SHEPHERD.

SCIENCE NOTES.

SMOKELESS FIRES AND GAS COMPANIES.

IN my last month's note on Mr. Scott Moncrieff's project for supplying towns with smokeless fuel, I referred to the probable difficulty of withdrawing the coke, from which only one-third of the volatile constituents have been distilled. Since that was written experiments have been made and this difficulty encountered. It appears to have been considerable ; but, as it is mechanical, it may be overcome by mechanical ingenuity. Mr. Moncrieff's original proposition was to extract only one-third of the gases and vapours. If one-half were taken the difficulty would be diminished, and the principle of his scheme might be still carried out, especially if combined with that of Dr. Siemens to the extent of using gas for lighting the fire and reviving it when desired.

I have done what is equivalent to this by simply attaching one of Fletcher's solid-flame burners to a flexible tube and placing it under the grate of an open American stove in my study, using as fuel a mixture of coke and ordinary coal. It answers admirably. In five minutes the fire is fully lighted, and I can regulate it to the weather by using much, or little, or no gas afterwards.

A holder of gas shares has objected to my strictures on the monopoly of the London gas companies. The answer to his and all other arguments that have been or may be used in defence of such companies is the simple fact that most of the great towns of the midland and northern counties of England have abolished the gas companies by purchasing their plant and monopoly rights at very high prices, and are now supplying themselves with far better and cheaper gas than they received from the gas companies, at the same time paying off *both interest and principal* of the money borrowed for the purchase. In many cases they make a considerable profit besides this, and are debating whether to use it in reduction of the local rates or to lower still further the price of gas. The latter seems to be generally preferred, and will be carried out as soon as additional plant is erected for supplying the additional demand that lower prices will create.

As the by-products now pay for the gas *at the works*, its prime

cost when it reaches our houses being simply that of storing and conveying it to us ; the economising of reservoirs, mains, pipes, &c., is of primary importance. While we only use it for lighting purposes, these reservoirs, pipes, &c., are idle during the day ; but once the price of gas is lowered sufficiently to render it as cheap a fuel as coal, we shall keep these mains, &c., profitably at work all day long, to the great advantage of all concerned. This consummation is so devoutly to be desired, that, if the London gas companies attain it sooner than it is reached by the gas-making corporations of the Midland and the North, nobody will desire them to be superseded. But if, on the other hand, the system of great towns co-operating to supply themselves with their own gas continues to prove its superiority to the present London system, it is not likely that the metropolis of the world will consent to remain behind the other towns of England in the supply of such primary necessities of life as heat, and light, and cleanly air.

THE FORMATION OF FOGS AND CLOUDS.

A VALUABLE contribution to the physical history of fogs, mists, and clouds has been recently made in a communication by Mr. John Aitken to the Royal Society of Edinburgh, a society that is far too much overshadowed by the Royal Society of London. He used two large glass receivers, one filled with ordinary air and the other with filtered air, the filtration being effected by passing it through cotton wool, which removes even the finest particles of dust. Into these he passed equal quantities of steam. In the unfiltered air the steam assumed the usual well-known cloudy form, in the filtered air it remained transparent.

From this it appears that aqueous vapour does not condense into cloud matter, or "vesicular vapour," as it has been called, unless it is supplied with some sort of solid nuclei upon which the water may be deposited. We all know what happens when we supply a large nucleus, such as a bottle of iced water in a warm room. In this case the amount of condensation is due to the lower temperature of the bottle cooling the film of air immediately surrounding it, and diminishing its capacity for retaining vapour. This film of air thus becomes super-saturated with steam, which it deposits on the bottle.

The air in both of Mr. Aitken's receivers was super-saturated, but in spite of this remained clear when it contained no solid surfaces upon which the steam could condense. I presume that condensation did occur on the surface of the receiver itself.

Water behaves similarly in passing from the liquid to the solid state. Pure clear water standing in a smooth vessel may be cooled down considerably below its freezing point, but immediately upon the introduction of a solid nucleus, such as a grain of sand or anything angular, crystals of ice are formed on and around the solid nucleus, and the temperature of the whole rises to the ordinary freezing point. Super-saturated solutions of crystalline salts act in like manner, sulphate of soda notably so.

Mr. Aitken infers that a fog or a cloud or mist is an accumulation of minute solid particles coated with an extremely thin film of water. Other experiments lead him to conclude that when there is much dust in the air, but little vapour condenses on each particle, and thus all may continue floating; but if the proportion of dust to condensible vapour is small, each particle condenses so much that it more readily falls as rain.

According to these experiments, there would be no fogs, no clouds, and probably no rain if there were no dust, but instead of these the super-saturated air would deposit its vapour as heavy dew on the surface of every solid body upon the earth. All clouds, fogs, mists, every puff of steam escaping into the air, and the visible condensation of our breath in cold weather, are indications of the dusty state of our atmosphere. This dustiness is indicated by other investigations. Piazzi Smyth, in 1856, erected a temporary observatory on the Peak of Teneriffe, at a height of 10,700 feet above the level of the sea, but the dust-haze which interferes with telescopic work was still there, though much was left below.

The sources of dust were examined by Mr. Aitken, and in the course of this investigation it appeared that the chief fog-producing particles are those which are not large enough to form the visible motes of the sunbeam, but are far finer and quite beyond the reach of human vision. He found that if pieces of glass, iron, brass, &c., were heated in air that had been filtered, they introduced clouds of dust producing a dense fog, and that this source of dust (or what Mr. Aitken calls dust) is so effective, that one hundredth of a grain of iron thus heated will produce a distinct cloudiness in the experimental receiver. Many different substances were thus tried, and all were found to be fog-producers.

The visible motes of the air may be destroyed by burning them with a gas flame; such a flame does not destroy the fog-producing particles, but on the contrary produces them, as was shown by burning gas in a receiver supplied with filtered air. The products of combustion of pure air and dustless gas gave an intensely fog-producing atmosphere.

The most remarkable fact connected with this fog-production by infinitesimal particles is that the fog-producing air from heated glass, metals, burning gas, &c., became incapable of producing fog when filtered through cotton wool.

The ordinary external air was found to give less fog during wet than during dry weather. This appears contradictory to our ordinary experience, but is indirectly confirmed by observations that have been quite independently made by M. André, and were communicated to the Academy of Science on the 3rd of January. A high barometer during a fog was observed to sink suddenly. Rain followed, and the fog disappeared; afterwards, with a rise in the barometer, the fog reappeared.

Mr. Aitken found that the air of a laboratory where gas was burning always gave a denser fog than that outside; and this occurred equally whether the gas burned as a Bunsen flame, a bright flame, or a smoky flame. The same with the products of combustion of a fire, whether clear or smoky.

Common salt burned in a fire or spirit flame gave an atmosphere of great fog-producing power, exceeding most of the other substances similarly tried, but the most intensely active fog-producer of all was sulphur. The fog it produced was so dense that it was impossible to see through a thickness of six or seven yards.

The vapours of other liquids, such as sulphuric acid, alcohol, benzole, and paraffin were diffused through air in the same manner as the vapour of water in the receivers. When their atmosphere was filtered they behaved like the water, and gave no fogs, but with ordinary unfiltered air their vapours condensed as water does, and gave sulphuric acid fog, alcohol fog, benzole fog, and paraffin fog, showing that solid nuclei were required for these vapours as for the vapours of water.

I am not addicted to verbal quibbling, but in this case am disposed to quarrel with the use made in this paper of the word "dust." This word has an established and received meaning, which we all understand, and I presume that none of us would apply it to the odorous emanations from a rose or a grain of musk. We suppose that something does emanate from these, but do not call it dust, mainly because its particles must be so infinitesimally minute. Now, I think the same applies to whatever it may be that is given off when a hundredth of a grain of iron is heated. The action that occurs in such a case must be more like sublimation than the driving off of what we understand by dust. In the case of sulphur, which has such remarkable power, we know that actual sublimation must occur,

and, likewise, the formation of sulphurous acid, which acid has so much affinity for water that its condensation of the aqueous vapour must follow as a simple act of chemical combination. The old experiment of opening a bottle containing transparent hydrochloric acid gas, and setting it free in the air, when it immediately produces a dense cloud, is thus explained, and I think that the same explanation meets some, though not all, of Mr. Aitken's results. The sensational lecture experiment of mixing clear ammoniacal gas with clear hydrochloric acid gas affords a startling case of fog-production purely by chemical action. The density of this fog is so great that we cannot see through a few inches of it, or even through one inch, if the experiment is well conducted. We know that the fog in this case is composed of minute crystals of chloride of ammonium formed by the combination of the two gases.

I therefore conclude that Mr. Aitken has probably confounded two sets of results—the mechanical adhesion to nuclei, and the precipitation due to chemical union. If not, there must exist some diffusible particles of matter having dimensions between the grossness of visible dust particles and the minuteness of the final molecular constituents which are supposed to unite when chemical combination occurs.

A NEW APPLICATION OF THE ELECTRIC LIGHT.

AT a fête held during last autumn in the vicinity of the forest of Fontainebleau electric lights were used. They attracted such a multitude of insects that two of the lamps placed in the open air at a coffee-stall had to be removed, "all the consumers being covered with moths of every description."

A correspondent of *Nature* states that in experimenting with a Browning electric light upon a roof in Charing Cross, "besides innumerable flies and moths, single individuals of two species of sphinxes were attracted, probably from considerable distances."

At the last exhibition of agriculture and insectology at Paris a medal was awarded for a lamp especially adapted for catching insects, and it has been suggested that the electric light should be used for that purpose. The idea appears rather extravagant at first glance, but when we consider the mischief done by so many species of these small creatures, and their infatuation in the pursuit of dazzle, we may yet see the suggestion practically carried out, especially where locusts do such fearful havoc.

Many years ago, when wandering on foot in the Highlands of

Scotland, I saw a strange vehicle coming down the hill I had just descended. It was a long packing-case mounted on four small wheels, and surmounted by a rough-looking man, who with a long stick steered its rattling course by pushing one or the other side of the road towards which it swerved. On reaching the bottom of the hill he dismounted and told me that he saw me pass the public-house above and thus came after me for company sake. We travelled together during the day, I walking and he driving his packing-case. On level or ascending ground he stood behind it, and, leaning forward upon it, pushed it along ; descending the hills, he sat upon it and steered as above. He assured me that he could thus do thirty miles per day with all his heavy luggage ; and as he did twenty with me after about 11 A.M., this was probably true.

I presently learned that he was an eminent journeyman naturalist, employed by a London society to collect insects for amateurs. Fifty subscribers of £1 each kept him at work for the summer months, and he contracted to supply each of the fifty with a certain number of mounted beetles, butterflies, &c.

He communicated many of the mysteries of his trade, such as "sugaring," "gingering," "sheeting," &c. "Sugaring" was a process of smearing eligible gate-posts, walls, or trees with treacle and glue, or some other unctuous sugary preparation. Certain insects were thus caught by the adhesion of their legs and wings to the bait. "Gingering" was a similar use of ginger wine, which, he told me, was especially favoured by certain species of epicurean flies. "Sheeting" was performed by hanging a white sheet between the trees of a suitable wood, and in the stilly hours of night throwing the light of a bull's-eye lamp upon it. Night-moths flew against the sheet, were stupefied thereby, and easily taken without damage to their delicate feather-dust ; and he was secured from interruption by the ghost stories his sheet invoked. He had several other methods of using a powerful lantern, so many and so efficient that he was prohibited from carrying on his trade on certain parts of the coast, lest he should deceive the vessels that were sailing by the guidance of lighthouses.

He made his summer livelihood thus, and in the winter was "the man in armour" at the Lord Mayor's show, and a pantomime policeman. Screwing on skates on the Serpentine and other odd vocations were added to these. Some of them would scarcely be called reputable by other people, but his only measure of morality was success. His ambition was ærial. If he could only get "a few swells" to subscribe enough to buy him a balloon, he would make his fortune. His best job had been in that line. Once, when he was not

engaged by the Linnæan Society, but was assisting at a balloon-filling at Cremorne, the distinguished aëronaut announced to make the ascent was found at the hour for starting to be so unusually drunk that he could not sit upright in the car ; the entomologist was offered ten pounds for taking his place. The distinguished aëronaut was put to bed, the entomologist, dressed in the aëronaut's clothes, ascended gallantly, waved the aëronaut's well-known cap to the multitude below, and descended safely.

But I am wandering from the scientific path indicated by this proposed new application of the electric light, a proposition which is strongly confirmed by the sage experience of my vagabond entomological friend, who, I may add, is the discoverer of many new species of British insects, especially of glow-worms. The above will probably identify him to some of our older naturalists, though I withhold his name.

DISINFECTION AND BORIC ACID.

ONE of the royal medals recently awarded by the Royal Society was deservedly given to Professor Joseph Lister, for his persevering advocacy of the necessity of excluding atmospheric germs from wounds, his practical success in doing so and in teaching others how to do it by means of the now commonly used carbolic-spray.

He has demonstrated that most of the ills that wounded flesh is heir to proceed from the activity of those living microscopic abominations, the bacteria, and other organisms that infest the atmosphere, fall upon all unprotected flesh, and forthwith begin to feed and grow and breed thereon, converting the flesh into putrefying or suppurating filth by the villanous chemistry of their unsavoury vitality.

Under ordinary circumstances they do not penetrate the skin, and therefore such an injury as the simple fracture of a bone (i.e. a bone broken internally without breaking through the skin) heals with comparative rapidity and without complication, if the constitution of the patient be sound ; but if the splintered bone breaks through the skin, forming a "compound fracture," a multitude of foul disturbances may follow, due to the above-named pestiferous little wretches. The same may happen if a wound is exposed only during the process of dressing. Professor Lister combats this by first discovering a vapour that poisons the pests without poisoning the patient, and then devising a method of applying it that shall not interfere with the necessary proceedings of the surgeon. This is effected by the "carbolic-spray." Its vapour either kills the germs, or renders them

incapable of further multiplication. Then the wound is bandaged in such a manner as to prevent any further exposure to the air.

It often happens that rude experience anticipates the results of scientific research. I may quote an instance of this : About 16 years ago I witnessed a curious case of successful surgery. An American engineer wounded his arm very severely with a chisel. He refused to have the wound sewn up or otherwise treated by a surgeon. Instead of this, he saturated some cotton waste with copal varnish, laid a large lump of this mess upon and around the wound, without drawing the edges together or taking any other precautions, and then bound his arm with some rag and a handkerchief. He assured me that nothing further need be done to it, that it would heal in its own fashion, and then the hardened mass of cotton and varnish would fall off, leaving merely a smooth clean scar. This was actually the case. He further told me that during a long and very rough experience in the far West he had treated many ugly wounds in like manner, and always successfully.

The philosophy of this is now intelligible. Essential oils, resins, and gum-resins like copal, destroy the vitality of bacteria and fungus germs ; thus the varnish cleared the wound of any of these that might have already settled upon it ; then as it hardened it formed an air-tight adherent cake, effectually protecting the lacerated flesh from further corruption. Thus protected it healed freely. Since witnessing this I have often thought that the ancient and apparently barbarous practice of completing an amputation by dipping the stump into melted pitch may have been quite as curative as the modern refinements of artery-tying, flapping, &c. The pitch would act in the same manner as the copal varnish.

During the horrors of the Franco-German war, Lister's method of disinfecting wounds was commonly practised—so commonly as to call for the creation of a new German verb, to *listern*.

I am told by surgical friends that the application of this principle of antiseptic treatment is now simplified by using boracic (or boric) lint, i.e. lint prepared by steeping it in a saturated solution of boric acid, and then drying it. Wounds, obstinate ulcers, &c., are covered with this and protected from the air, whereupon they heal in the same manner as the varnished arm of the American engineer.

The antiseptic properties of boric acid (also designated boracic acid) are now becoming understood. They are very remarkable, and could not have been theoretically anticipated by any *a priori* consideration of the chemical properties of this acid, which is the mildest of mineral substances bearing the name of acid. It appears to

poison our microscopic enemies, without having any injurious action on ourselves, whether applied externally or swallowed in moderate quantities. Hence a solution of this acid may be used for washing meat that has been kept beyond the customary time, and in a variety of other ways for food-preservation.

Mr. H. Endemann finds that fresh beef packed with one per cent. of boric acid, and a salt pickle of 50 per cent., remains sweet for several months, during hot weather, but that beef previously salted could not be thus preserved. A. Herzon has recently made a series of experiments, showing that boric acid has no effect in preventing the fermentation of sugar, so far as its conversion into alcohol is concerned, but that it entirely prevents the further fermentation which converts the alcohol into vinegar. This should have an important practical application in brewing and wine-making, quite irrespective of the vexed question of whether the *Mycoderma aceti* are, or are not, poisoned by the boric acid; or whether they generate the vinegar, or only feed upon it after its production.

I believe that I may justly claim for my friend, Mr. Arthur Robottom, the practical discovery of the antiseptic properties of boric acid and its compounds. As the circumstances of this discovery are curious, I will here narrate them.

In the course of an adventurous journey in Southern California, he left the road at Indian Wells, and travelled over twenty-seven miles of a desert of loose sand till he reached the mouth of a salt cañon—a gorge about twenty to forty yards wide—with rock walls, and the bottom covered with salt, in some places more than a foot in depth.

After struggling through nine miles of this, and suffering severely from the intense heat, he reached its expansion into an open valley fifteen miles long and eight miles across. This, now known as the Great Borax Lake, was the main object of his journey. It is completely paved with a deep bed of salt; not a blade of grass or any other vegetation is there, nor any kind of wild animal; not a bird to be seen, nor even an insect. Here and there a few brine pools, but all the rest a snow-like surface of salt.

This salt consists of carbonate and other salts of soda, largely of borate of lime and borates of soda. It was for these that Mr. Robottom was searching, and having found them, negotiated for the concession of a portion of the land according to Californian usage. In May 1874 he revisited the dreary waste to confirm his claim. This time he was accompanied by Mr. T. Doidge, and there was a hut in the valley, and two men occupying it. The heat was intense, 119° in the shade; the water they carried in their canteens had become hot

and undrinkable, the air so dry that they breathed with difficulty. Mr. Robottom could only walk about ten yards without stopping to rest.

He saw a dark object in the distance, lying on the salt. On reaching it they found it to be a dead horse partly imbedded in the borax and borate of lime, which here formed an upper crust about 12 to 18 inches thick.

He sat on the horse to rest, and was surprised at the absence of any odour, having had in Mexico some painful experience of the stench arising from similar carcasses exposed in similarly dry hot air. He cut away some of the skin and found the flesh quite sweet, exhibiting no signs of decomposition, and the hair quite firm on the skin. On reaching the hut he learned from the men that the horse died seven months before, and the carcase had remained there ever since.

The most interesting feature of this discovery is the fact that the portion of the carcase not in contact with the salt, and so fully exposed to the air, should have remained thus undecomposed. This supports the theory, now rapidly gaining ground, which attributes all decomposition of animal substances, not to mere chemical action, but to growth of microscopic fungi, bacteria, or similar organisms. According to this, the oxidation that unquestionably occurs is not due to direct action of atmospheric oxygen upon the dead animal matter, but is a secondary consequence of the vital proceedings of these microscopic busy-bodies, which are usually described as omnipresent.

In this grim desert even these are stricken by the all-pervading death. Boric acid is volatile, and in such a climate its vapour would pervade the air, poison the germs of poison, and do so without perceptible injury to creatures like ourselves.

This fact is of great practical importance. It opens up new methods of preserving food and of harmless disinfection. It would be out of place to enter upon the commercial aspects of the subject here. I may only mention that much is being done, and we shall hear more and more of the sanitary and domestic uses of boric acid and borax.

About thirty-two miles from the Great Borax Lake is another similar deposit known as Death Valley—a salt desert still hotter and even more deadly. An attempt was made by a party of emigrants to pass over it, but all perished. Their bones and waggons now lie bleaching in the sun. Both deposits are apparently the dried beds of salt lakes similar to that near to which the Mormons are settled. Mr. Robottom “prospected” many other minor salt valleys in the Nevada region.

W. MATTIEU WILLIAMS.

TABLE TALK.

FRENCH works of reference are so largely used by English scholars, that it is to be regretted some pains are not taken to secure supervision by an English man of letters of articles upon English subjects. The new edition of Vapereau's "Biographie des Contemporains" has reached me too recently to enable me to test very closely its merits. I find, however, on the most cursory glance, some inaccuracies and many shortcomings. It is perhaps pardonable that Earl Russell (whose death is mentioned) should occupy a place larger than is assigned most living Englishmen. It is disappointing, however, when, after reading of the pre-Raphaelite movement, we turn to Rossetti, and find that the only person of the name—or a name almost identical—is a Roumanian poet, entitled Constantin X. Rosetti. It is not true, as is stated, that Mr. John Morley changed the title of the *Literary* (sic) *Gazette* into that of the *Parthenon*. That change was accomplished by Mr. Goodwin. Mr. Swinburne may be surprised to hear that his Essays are more successful than his Poems, and other men of letters will be puzzled at the errors that have crept into the descriptions. Still, though the information is meagre, it is a great advance upon anything to which we have been accustomed in works of this class. I have never been able to verify the charge brought against a previous book of this description, that it supplied as the principal works of John Stuart Mill the three following treatises: "Mill on Political Economy," "Mill on Representative Government," and "Mill on the Floss"!

"I HAD a pistol, and so I thought I would kill him," or words of the like effect, are said to have been spoken, during his examination recently, by a man charged with one—or rather two—of the most mysterious murders that have ever been committed—mysterious from the psychological standpoint, that is. The logic of this criminal is closer than is at first sight obvious. No stronger inducement to crime apparently exists than facilities for its perpetration. Let swords and pistols hang on every tree, and the rate of deaths by violence would mount to a gruesome total. When every man carried a sword, a duel was the natural result of any slight

dispute. Our early literature is full of proofs how dangerous was the custom of carrying weapons, as is our proverbial or colloquial speech. What a picture of quarrel is afforded when we say of two men that they are "at daggers drawn." "Lie thou there, *Sweetheart*," says Pistol, addressing the not very mortal weapon he carries, when he lays it on the table in order to drink at his ease. His use of the term is doubtless indicative of fashions of speech among the roysterers and swashbucklers of the day. A similar state of affairs is indicated by Mercutio, when he taxes Benvolio with being "Like one of those fellows that, when he enters the confines of a tavern, claps his sword upon the table and says, 'God send me no need of this,' and by the operation of the second cup draws it on the drawer when indeed there is no need." It is useless to multiply instances, however, of the danger that springs from the habit of carrying weapons. The cessation to do so is the most important step that a nation makes in the direction of civilization. At the present moment it is illegal to carry weapons in England. One who listens to the cases at the police courts will ascertain, however, that a week rarely passes without a revolver in the hands of a drunkard proving a source of danger or injury to some one. I call, then, for a stricter application of a law already in existence. Let the fact that a man carries a weapon, when it is ascertained, be a cause for his instant arrest ; let the police have orders to seize every man they find thus armed, and let the magistrate inflict the highest penalty, and we shall soon return to a better state of things. It is monstrous to think that not only professional burglars and assassins walk about thus armed, but that mere lads are constantly in possession of weapons which are a source of constant and grave danger.

CONSIDERING that books upon bibliographical and dramatic subjects are, in the long-run, among the most successful of all works, I am surprised that no one has thought of continuing down to the present time the two great works bibliographical and dramatic which England has yet produced—Lowndes' "Bibliographer's Manual," and Genest's "History of the Stage." A subscription could easily be obtained for either work if it were undertaken by men competent to the task. The bases of both books would have to be enlarged. I am aware that Genest's history was a labour of love and loss, and that the statistics of Lowndes' labour hold out little temptation to others to follow his lead. Times have now changed : prices, and book-buying, and attendance upon theatres, are not what they were a generation ago. An immensely augmented public is now interested both bibliography and the drama.

WHEN the improvement that has been made in the cloth bindings of books is taken into account, it seems singular that so little is done with regard to bindings in leather. At the present moment the designs upon the covers of some modern works are so tasteful, that a great sacrifice has to be made when the cloth wears out and has to be replaced with calf or morocco. In the "Caprices d'un Bibliophile" of Mr. Octave Uzanne—a delightful work of a French antiquary, who has lately been winning golden opinions in London—are some valuable and original suggestions, with regard to the manner in which books should be bound. No less fanciful than Leigh Hunt, who has discussed the same question, is M. Uzanne; and he would have us turn to account for purposes of bookbinding the rich and tasteful fabrics that have lately reached us from India, China, and Japan. After saying that each bookbinder in the eighteenth century had his speciality, his peculiar style, and that no inducement would make him copy the manner of his predecessor, M. Uzanne continues, in words to which I am glad to give added publicity: "In modern times, binding, which has advanced as a trade, has declined as an art. It knows no precepts, and cannot escape from the sterile and monotonous. *Artist-bibliophiles* may draw it from the slough, in ordering for their books bindings or half-bindings of fantasy; on which is the stamp of personality and originality. They may employ to this end the delicious remains of past times, and the lovely products of modern industry—the silken fabrics, the fine kid-skins, the exotic leathers, the tissues with arabesque designs, all the chromatic gamut of pale and fine colours that men have not dreamt of putting to such use. A book should be dressed with all the maturity of thought which one employs in serious matters. One ought to be penetrated with its intellectual physiognomy, and dream over its toilet with all the proud vanity, all the science of harmony, that one brings to the toilet of the woman one loves." This is as true as it is admirably said. To many of my readers M. Uzanne will probably be known as the editor of *Le Livre*, a magazine dedicated to bibliography, which under his management has lately accomplished its first year's existence.

THE chief obstacle in the way of that diminution of street noises for which dwellers in large cities vainly pine consists in a curious species of sentiment on the part of a considerable number of people. In the case of bells an absolute debauch of sentimentality is encountered. A kind of poetry such as clings to the vesper bell or the curfew is supposed to attach itself to the muffin bell, and the hideous jangle of the tramway cars is likened to the joyous carillon of the approaching "diligence." It is necessary for

people to learn that for a noise to be poetical, it must be unfrequently heard. The warmest adherent of tradition and admirer of the past would not care to live immediately beneath St. Paul's, were the bells always clanging. A position scarcely less objectionable is that of one who has in front of his house a tramway, to the cars on which, or to its horses, bells are attached. That these things are unnecessary is proved in the fact that they are only adopted on certain lines. Those, too, who live in busy thoroughfares scarcely guess how maddening is the effect of street noises and street music in quiet districts where sound travels far. That weapon of torture, the barrel organ or the street piano, was designed to prevail over the rattle of London life, and its horrible grind might be heard through the din of a beleaguered city. Those who know it only as it presents itself in crowded thoroughfares cannot conceive over how wide an area its sound is capable of extending. It is a very *mitrailleuse* of noise.

SINCE describing, in the *Gentleman's Magazine* for November 1880, the manner in which the "*Nouvelle Biographie Générale*" is scamped towards its conclusion, I have been struck by the number of books of which the same thing holds true in a greater or a less degree. Wright's "*Dictionary of Provincial English*" thus gives in a first volume the letters from A to F inclusive, and sums up the remainder of the alphabet in the second. Very many works of reference deal after a similar fashion with the alphabet. Now, the exact division of the alphabet occurs, of course, between M and N ; and although the latter half includes two or three letters, like Q, X, and Z, under which very few words are classed, this fact is not enough to account for such irregularities as I have indicated. Richardson's "*English Dictionary*," one of the most careful and scholarly works of its class, makes a just division in closing its first volume with K ; while, in the "*Biographie Générale*," half of the work carries the reader no further than a third of the way through H. These proofs of large ambition and comparatively small accomplishments are of course sadly human. It is creditable to Dr. Brewer that his two useful volumes, the "*Dictionary of Phrase and Fable*," and the "*Reader's Handbook*," are conscientiously carried out ; the middle of one being in the letter L, and that of the other at the close of K. The first half of M. Vapereau's "*Biographie des Contemporains*" extends no further than half-way through H. The application of a test of this kind furnishes a species of criterion of conscientiousness of workmanship.

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THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER X.

CLEMENT'S EVENING WALK.

GERALDINE was very thoughtful all the evening after her excursion to Tower Hill. She was a good deal interested in Clement Hope, and somewhat touched as well as amused by his melancholy and his passion. She was sorry that Melissa did not care for him, and yet was inclined to think that it would not be well for the young man if she did.

It is superfluous to say that Geraldine was greatly interested in love-making of any kind. She had never as yet been herself in love. She had not even felt the schoolgirl's immemorial passion for the music-master or the drawing-master. She had had a great deal of admiration, and she often knew well enough that men were hinting love to her ; and she had even had direct offers of hand and heart, and so forth. But although she liked men in general, and some men in particular, she had never been brought to heart-throbs for any man as yet. The very fact gave her much of her ease and what might be called good-fellowship in the company of men.

She had lived in all her younger days a happy and a sheltered life. She was so deeply attached to her father, and had such a friend and companion in him, that she liked all mankind the better for him, and no one man in particular, for the same reason. Then came sorrow ; and after the worst of the sorrow had passed away, a season of anxiety, not yet drawn to an end, in which money matters were a

good deal mixed up. It was not even yet certain whether Geraldine and her mother were to be actually poor or not ; whether Geraldine would not have to fight her way through the world by teaching or by such painting as she could do, or in some such way. Her mother was a very sweet but not very strong-minded woman ; and the most of the thinking fell upon Geraldine. Her visit to Europe with Captain Marion's family was Geraldine's first holiday of any kind for some years. It was her first uprising after the prostration of grief and the long season of anxiety. It was like a convalescent's first drive in the open air. When she was leaving her American home her mother made one earnest request of her. "Darling, you are going to have a holiday ; now, let it be a holiday. Promise me that you will really do your best, your very best, to enjoy yourself ; that you won't keep thinking of things that make you anxious, and that you will let yourself be happy with our friends." Geraldine promised, and was determined that she would do her very best to keep the promise. It was very, very difficult at first ; but as the days went on it became easier and easier, and now in London Geraldine was really and truly enjoying herself. She had by nature a soul and spirit made for enjoyment ; made to find happiness easily and to give it freely. She had health and strength, a splendid constitution, and high spirits. Perhaps her courage and elasticity of temperament might have made her even heedless and over-impulsive in her ways, if so much of her natural inclinations had not been curbed and made patient by a sudden sorrow and prolonged anxiety.

"I like your young friend very much," said Geraldine to Miss Aquitaine that same evening when they had returned to their home.

"What young friend ?" asked Melissa languidly.

"Oh, come ! you know ; your hopeless Mr. Hope. I like him very much."

"Do you ?" said Melissa. "I am very glad. I don't."

"I think he is a sweet boy," Geraldine declared.

"He is not quite a boy," said Melissa ; "I suppose he is four- or five-and-twenty. I think he is quite old enough to have more sense, and to know what he is going to do with himself. I think he is a very stupid boy, or man, or whatever you choose to call him—stupider even than men in general, if that were possible."

"He seems to me very clever and full of promise. I should think he is a young man likely to make a name for himself in the world."

"I wish he would make a name for himself," said Melissa, "if he likes it ; but what I object to is his trying to make a name for me."

"I think you like him, after all, in the bottom of your heart," Geraldine said, trying to find response in Melissa's downcast eyes.

"If he comes here very often he will soon find whether I do or not," was Melissa's genial answer.

"How do you like Mr. Montana?"

Melissa remained silent, and Geraldine, fancying she had not heard the question, put it again.

"Mr. Montana," Melissa said at last, "is a very different person from Clement Hope."

"Yes, he is indeed," Geraldine answered with emphasis, "*very* different. If I understand anything of men, I think Young Hope is a true man."

"I don't understand anything of men," said Melissa, "and so I don't know whether he is true or false, but I don't regard Mr. Montana as an ordinary man, and I don't care to discuss him on the same level with Mr. Hope."

Somebody entered at this moment, and the conversation dropped. Geraldine was full of pity for Clement Hope, and not without a certain womanly anger for the scornful little maiden who thought so lightly of him and his love. She could not help wondering in her heart what it was that Clement Hope saw in Melissa to make him so completely her slave. "He seems such a fine noble young fellow," she thought, "with a good deal of the poet's soul in him, and after all there is nothing in Melissa. She has not much brains, and I don't think she has any tender feeling, she is a sort of girl who ought to be happy: she has everything she can want for herself, and she scarcely seems to think of anything but herself; she is safe against any chance of falling in love; and if she fell in love, it would not hurt her. Whatever is wrong with her, it can't be love." Geraldine suddenly remembered that there certainly was something wrong with Melissa. Her tears the other day were very genuine.

Meanwhile, Clement Hope was going home with his mind and heart all aflame. The incidents of the day might seem unimportant to others; they consisted for the most part of a muddy walk round three sides of the Tower, and an introduction to a gentleman from America: but they seemed to Clement to promise a revolution in his whole conditions of being. He hardly found himself able to analyse his own emotions, to say what had become of old thoughts, and what was the meaning of the new ones that were coming up in their place. Clement really was what Mr. Aquitaine had described him, one of that class of mortals, very trying to all the world outside themselves, the poets who do not compose verses. His mind

had for a long time been filled with his hopeless love for Melissa. Mr. Aquitaine had gauged very accurately the depth of his feelings on that subject. Melissa was the first pretty and graceful girl Clement ever had the chance of knowing, and he met her at a time when his fancy and his feelings were alike yearning for some one to fall in love with. A pretty servant-girl would almost have served his purpose if no more attractive woman had come in his way. Melissa's little rudenesses and saucy ways had naturally rather the effect of inflaming than chilling his love. He grew more and more into the conviction that she was the one being essential to his happiness, the one love for his life. He honestly believed that he was in love with her, and that he never, never could be in love with any other woman on earth. This idea he had nursed and humoured so long that all the strength and sweetness of it came to be added to the self-delight and self-torment of imagined passion. He had no serious hope of marrying Melissa, and indeed, for the present, marriage was out of the question for him. Gratitude to the old man who had adopted him and made him a son rendered it impossible for Clement to think of taking any step in life which could have interfered with his home duties. Besides, to this young man, brought up modestly in the great northern seaport, the bare idea of his marrying a daughter of the house of Aquitaine seemed about as wild a fantasy as it would be, according to Major Pendennis, for young Arthur to dream of asking in marriage a daughter of one of the great houses into which his uncle kindly introduced him. Perhaps at this time of his life, and of his feelings also, it was rather gratifying than otherwise to Clement Hope to believe that he fed upon a hopeless passion. Despair is a great deal more soothing to the self-love of youth than hope. To believe oneself marked out by destiny for a ruined life tends very much to make the life itself pass meanwhile pleasantly. Clement was not conscious that he thus enjoyed his despair, but the enjoyment was there none the less.

In the midst of his conflict of emotions there rose upon his horizon the figure of Montana, as yet but a shadow to him. He heard of the great strange orator and leader from the new world, who was opening up an entirely fresh career to young men of promise and of soul. In a moment Clement became impressed with the conviction that under the banner of Montana it was his duty to rank himself. Aquitaine had put it well. Montana and his new colony became the Saracens and the Holy Land of Clement's disappointed imagination. A few centuries before he would have longed to buckle on his armour and make his way into Syria to fight the infidel and obtain, if

Providence were only kind enough, the glory of a warrior's grave. Now it seemed a special dispensation on his behalf which brought into light Montana's scheme for a new commonwealth, and sent Montana himself right across our young hero's path. Over all this conflict between the past and the future there was shed a certain soft kindly light which, although Clement then hardly quite knew it, undoubtedly shone from Geraldine Rowan's sympathetic eyes.

He had been introduced to Montana. He had spoken with the great man. The great man had taken kindly to him, and invited him to come and see him. The great man had looked at him fixedly, and Clement felt sure that Montana at that moment was putting him through a mental process of ordeal, subjecting him to a spiritual examination, just as a new recruit is tried by a physical test, and was examining into Clement's strength of soul, in order to decide whether he really was or was not a fitting disciple of the new movement. When, after this mental inspection, Montana spoke to him kindly and invited him to call on him, Clement accepted the invitation as an acknowledgment that he was esteemed a welcome and a worthy recruit. Montana, indeed, had not been subjecting Clement to any such mental test ; nor was he, after his usual fashion, engaged in thinking of something quite different while he looked fixedly at the person before him. He was thinking about Clement, and was greatly attracted by him. He was puzzling himself to think what young man he could ever have known who seemed to look like Clement, and how it came about that the face, the figure, and the eyes were so familiar to him—that they seemed to have been part of his own youth. He was greatly attracted towards Clement, and convinced that in him he would, indeed, find a valuable follower, a companion full of faith and courage. "Call for me on Sunday," said Montana, as they were parting, "and we will both go together to the Church of Free Souls."

Clement walked slowly home through the gathering evening. The evening was finer than the day had been, and the West was now glowing with all the richness that belongs to the sunset of a summer day that has been wet. Clement's way led him far from Piccadilly, whither he had conducted the young ladies to their home, and he walked all the way. It seemed to him as if he wanted all the time he could have for thought ; for thinking over things, for thinking of himself and the new conditions that were growing around him, of his disappointment and of his hopes. In truth, our young, verseless poet was very happy, if he did but know it. Perhaps no possible success in life and ambition and love could make any man so happy

as Clement Hope might now have been in his ideal disappointment and his ideal prospects. The very sunlight drew for him a softer colouring from his poetic love-pain and his poetic hopes. Sometimes he was for a moment dimly conscious, as he loitered along, that the clouds driven to the east and the fires of the west, the grass and flowers of the parks, and the ripple of the water by which he now and then had to pass, were steeped in a new and special beauty for him, which made his disappointment seem easy to bear, and made the form of Melissa Aquitaine seem less distinct than it had been before. Although he did not then know it, one little star in his life's firmament was growing dimmer and dimmer, because another and a nearer and brighter, had now come up in the sky. Yes, that was a delightful, thoughtful walk home that evening for unhappy, very happy Clement Hope.

His way lay through Regent's Park ; and he had to cross a bridge where once a certain Minola Grey, now Lady Heron, wife of the distinguished Colonial Governor, Sir Victor Heron, used to linger at quiet hours, when there were no loungers near. Clement stopped and leant on the railing of the bridge, and looked down on the ruffled water of the canal. The face and the eyes of Montana seemed to look up to him out of the darkening water. He could not tell what had put this odd idea into his head ; but whenever he looked fixedly into the water he seemed to see Montana's eyes looking up to his own. The impression was uncomfortable, uncanny ; and Clement went his way, anxious to get rid of it. He was a poetic youth ; poets, even only *en herbe*, must have their odd fancies.

Clement was going home to the house of the kind old man whom he called his father. The livery-stable keeper had long since given up all manner of business, and settled with Clement in a house not far from Primrose Hill. The old man was rich enough, and, except for Clement, had nothing to do with his money. He was leading a blank, half-puzzled sort of life, growing every day more and more into the conviction that he was to see his lost son again ; growing only more eager to see him with every year that intervened between the present and the past. Much as he was attached to Clement, yet Clement's presence seemed only to keep alive all the more the memory of his son and the longing to see him. Although he had adopted Clement, and the young man called him father, he had never asked Clement to take his name. He was Edmund Varlowe, old Edmund Varlowe now ; and there was once a young Edmund Varlowe, and that was all. There could not be any

young Edmund Varlowe but the one ; so Clement Hope remained Clement Hope.

When he had crossed the bridge, Clement had not very far to walk before he reached Mr. Varlowe's house.

The house was an odd, old-fashioned building. It belonged, probably, in point of fact, to the early Georgian days, but it must have had an old-fashioned look even when it was built. Not that it could have had the appearance of an imitation of some older fashion, some modern-antique, some affectation of revivalism. Such affectations did not prevail in the somewhat dull but very simple and straightforward days when its foundation-stone was laid. It was evidently one of those houses which have the peculiarity, as some girls have, of always looking old-fashioned even in their freshest days. If perchance some whim were to cause a revival of the precise period of the Georges to which this house belonged, the house itself would still look old-fashioned and even out of place beside the very neighbours which were supposed to reproduce the architectural peculiarities of its day. It was a solid block of a house, with rounded corners and two straight rows of windows above the ground floor, the ground floor itself only showing to the gazer's view a door with a semi-circular fanlight. On the roof was a round turret, with a little dome-like cap on it and a weather-cock. This might be an observatory, or it might only have been the architect's idea of an ornament. The house stood alone, with a little patch of mournful-looking ground about it, and it was on the height of a gentle slope that drew back from the waters of the canal. There were many trees and much shrubbery in that region, to say nothing of the foliage of the adjoining park. One standing on the opposite bank, and looking across to the house, could sometimes, as it so happened, see no other human habitation whatever but this oddly constructed dwelling, and might fancy himself far away in the heart of the country, and gazing on some family mansion to which the owner was accustomed to travel down in the family carriage when the season for town was over, in the days when Mrs. Thrale was yet a saucy child, and before the "*Vanity of Human Wishes*" had been written. It was well worth spending a few moments on the spot from which the house could thus be seen, if it were only for the curious effect produced by the sight of the dull old dwelling, the observatory, the weathercock, the canal, the thick trees, and the absence of any hint of other human habitation. It did not tax the fancy of the gazer very much to suppose himself for the time transported not only out of London, but out of the century. When he had enjoyed that sensation long enough, he had only to walk a

few paces either way, and he was in London and the nineteenth century again to his heart's content.

The effect was especially good when the evening began to fall. The house was one to be seen in the evening. There was a suggestion of age and even of decay about it which suited with dun evening clouds and "black vesper's pageants." Why should not Clement Hope feel a new interest in such a scene, familiar as it was

him, and in the odd effect produced by such a house in such a neighbourhood? Clement was only too much given to the half-sensuous enjoyment of any idle fancy, and he had often a good deal of time to throw away on such harmless, indolent delight. He lingered this evening, and looked long at the house, and took up positions from which fresh picturesque effects were got, and studied the scene as if he had not looked on it before. At last he made quickly for the house, and when he came to its railings and gate he saw that Mr. Varlowe was walking in the front garden.

The livery-stable keeper was falling fast into years. His hair was long and massed about his head ; the hair was perfectly white ; his moustache and beard were white ; but he had lost hardly anything of his dignity of bearing, and he only stooped occasionally when he happened to have been for some long time sitting in his chair. He walked usually upright, with a soldierly, resolute air, and shoulders squared, and might have been indeed a very statuesque figure but for that curious appearance about the legs which belongs to men the greater part of whose lives has been passed on horseback.

An odd sensation came over Clement as he opened the gate and saw the old man coming down the gravel walk. It was as if he had never seen Mr. Varlowe before, but suddenly began to be struck with the strange impression of a likeness to somebody he had seen elsewhere, and whose identity he could not now recall. Clement stopped in his walk up the garden, and looked with a curious half-puzzled air at the old man, exactly as one looks when caught by some impression of unexpected resemblance. The thought that passed across Clement's mind for the moment was that familiar thought, "Surely I have seen that face, or something very like it, before," and then the momentary confusion became all the more confused in the recollection of the fact that it was the face he had been seeing every day since his boyhood.

"You seem puzzled a bit, Clem, my boy," Mr. Varlowe said ;
'what has gone wrong with you?'

father," said Clem ; "only, as I came up, I could not

help thinking that I had seen some one lately who reminded me of you, and I think you now remind me of some one I have lately seen."

"Like enough," said the old man; "a good many men of my age about London."

"But not a good many of your figure and face."

"Well, I don't know; there are some, anyhow; and the fewer there are, the more likely you would be to notice any one you chanced to see. But you have been a good long time away, Clem, and I have been mainly anxious about you now and then." Mr. Varlowe still retained a good many of his northern peculiarities of speech.

"I have been meeting a wonderful man," said Clem.

"Ay, ay? What is he like, now? and how does he come to be wonderful?"

"Well, he is a man who has a grand scheme for founding a new colony and beginning a new life out in America."

"I don't believe much in those new schemes," said the old man gloomily, "they seldom come to anything. What do you want leaving old England? Let her people stick to her, that's my idea. Let all people stick to their own soil while they can, Clem, my boy. Believe me, a man's never so happy as when he's at home."

"But all men can't stick to their own soil," said Clem, "and some have no home to keep to."

Mr. Varlowe looked at him anxiously. He sometimes began to be afraid that the young man's natural desire to see the world was oppressed by his confinement at home. "You are not one of that sort, Clem, my boy," he said; "you have a home as long as you like to stay there."

"Oh yes," said Clem hastily. "I don't mean that. I was not thinking of myself. If everybody was as well off as I, there would be no use for new schemes and new colonies. But when you have been with a master mind like Montana, you get to think very little of yourself, and your own ways, and your own emotions, and you begin to see that people ought to work for others and think for others."

"You think for others, I am sure," said the old man; "you don't think much for yourself; you always think for me."

Clem felt a pang of remorse when he had to acknowledge to his own mind how small a part in his thoughts his fine old father had played for many and many an hour when compared with capricious little Melissa Aquitaine. This was the one secret he had not ever

ventured on disclosing to Mr. Varlowe, and this he kept back only because he feared it would distress the old man by making him think that his adopted son must soon find new ties and new associations.

"Then, he is wonderful, this new man? Is he a lecturer or a preacher?"

"Well," said Clement, "he is a lecturer and a sort of preacher, but I have not heard him lecture or preach; it is the man himself who impresses me. I have only talked a few words with him, but they made me feel as if a new life ought to be opening out to me, and as if I ought to be doing something great. I don't mean," he added quietly, "that I ought to be doing something great myself, or that I could be doing anything better than I am doing, but that there is a higher purpose in life when one gets out of one's own small concerns. He is a man who makes one feel ashamed of troubling himself about passing and personal affairs."

They were now walking up and down the gravel path. This was a favourite amusement of Mr. Varlowe. He liked to walk up and down in the evening leaning on the shoulder of his young supporter; not that the strong straight figure seemed to need much support; and although our youth was of fair stature, he stood considerably shorter than the elder man, who leant on him with a kind of affectionate semblance of weakness requiring to be upheld.

There was certainly something about Clement's look to-day which still puzzled Mr. Varlowe. The boy did not seem quite himself, he thought; there were alternate lights and shades crossing his face, as if some vexation had its turn occasionally, and was then succeeded by a new light of hope and of elated purpose. Mr. Varlowe had been so long a widower, and, never having had any daughters, had had so little to do with the affairs of women or their gossip, that it never occurred to him for a moment to think it possible Clem's trouble might have been caused by some daughter of Eve. Clem, to his mind, was still only a boy, although a tall and strong boy, and Mr. Varlowe never dreamed that the lad might be in love. But he could see well enough that something was troubling Clem, and he felt uncomfortable at the idea of anything being hidden from him.

"Something is the matter with you," at last he said bluntly. "You seem distressed somehow. You are taking something to heart. Come, out with it, there's a good fellow. Let me know. You don't want any money, do you?" for in his puzzled moment he could think of no trouble that could come to young men unless the want of money.

"No," said Clem smiling, "I don't want any money; you always

take care that I have enough of that. Indeed, nothing is the matter with me but that I have been talking to Mr. Montana, and that he makes me feel rather ashamed of my own life so far. I have been doing nothing. I think a man should have a purpose, even if he is not ambitious enough to want a career."

"Never want a career!" said the old man with energy. "Whatever you do, Clem, my dear boy, never want a career; never have anything to do with careers; careers are the ruin of boys. I know people who went heaven knows where because they fancied they ought to have careers. Don't do it, Clem; I hate careers. Whatever we talk of, let's hear no more of that."

CHAPTER XI.

"MUST NEEDS TO THE TOWER?"

It would be superfluous to say that Clement Hope did not fail to call on Mr. Montana at the appointed time. Montana lived in one of the Piccadilly hotels. He had a handsome suite of rooms there, and appeared to live, according to the familiar phrase, "regardless of expense." Outside his door, on the first floor, waited a negro serving-man who had once been a slave, and who had afterwards fought in a black regiment of which Montana volunteered to take the command. The negro asked Clement's name, and on hearing it instantly showed him into a large reception-room. There Clement saw a man who appeared to be servant or attendant of some kind, lounging in a listless sort of way near a window which looked on Piccadilly and the park. This man was much younger than the negro; he was, in fact, a lad of about twenty. He was of a complexion and style of feature new to Clement. He had a sallow, dark-greenish, oily complexion, and long, lank, streaky hair. Clement assumed that he was a foreigner of some kind, but ventured to address him in English. The young man replied in a kind of broken English, and with a sad, sickly smile intended to suggest a welcome. He explained to Clement that Mr. Montana would come in a moment, and that Clement was meanwhile to wait. Then the attendant, or whatever he was, fell back into the window, listless as before.

Clement looked round the room. It was furnished, of course, in the usual style of a West-End hotel, but there were a good many appointments added which spoke of the individuality of its present

occupant. There were masses of papers, English and foreign, blue-books, and reports, and one table was almost covered with unopened correspondence. On another table a sword was lying. Clement took it up, and with a sort of vague curiosity drew it from its sheath. The sword was dented in many places, and had engraved upon the blade the words "Fredericksburg, Gettysburg, Richmond." Many architectural plans, drawings, and even models were scattered about. On a smaller table in a recess was a careless heap of watches, jewelry, chains, trinkets of all kinds, and money.

Montana came in while Clement still had the sword in his hand. Montana entered the room slowly, with his usual demeanour, as one rapt in a reverie or a dream. He did not look at Clement till he was quite close to him, and then his face lighted up with the sudden beaming smile which had fascination for so many of his admirers, and even went far to disarm his enemies. It seemed to have something special and personal in it. It seemed to say to the one on whom it lighted, "You are the person I specially wished to see. You are the person whose presence was most needed at this moment to my purposes and my hopes."

Clement's heart went out to meet this gracious smile. Montana held out his hand in a cordial fashion, and Clement pressed it almost with reverence. But, as Clement looked into Montana's eyes, the same kind of puzzled thought perplexed him which had seized him when he returned home that evening of which we have just spoken, and he saw Mr. Varlowe in his garden. "Have I not seen a face very like this lately?" was the thought. It so dominated Clement for the moment as positively to interfere with the cordiality of his reply to the friendly greeting of the great leader.

Montana turned to the attendant and said a few words to him in a tongue which Clement not only could not understand, but which bore no resemblance to any language with which he had the least acquaintance.

"He is a Red Indian," said Montana, "an Indian of the plains; the Forest Indians, the noblest of the race, are gone. I brought him away from the territory which, by an odd chance, has the same name as myself. There was a massacre of the Indians in Montana, a massacre which they said was provoked by the Indians themselves, and I saved this lad. There was risk in it, but I did not care. He is devoted to me. He goes about with me everywhere. I shall not have him long."

"Why not?" asked Clement. He saw that Montana seemed to wait for a question.

"He will not live. He cannot live in civilization. The life of cities is fatal to the Indian, and this lad was sickly from his birth. Anyhow, the Red Indian does not get on in what are called civilised parts of the world, and the farther west you find him the less is he fit to breathe our fetid, unwholesome air."

"But I suppose," said Clement, "you will take him with you to the new colony?"

"The new colony," said Montana coldly, "cannot be built, or even begun, in a day; in the meantime, I fancy my poor lad must die. But I don't see much to regret in that. I don't take the common view of death. If there is no purpose in life I see no use in remaining in it."

Clement hastened to say that such was his own sentiment exactly.

"The man you saw at the door," said Montana, "I brought from down south. I got him away by what we used to call the 'Underground Railway' in those days, an organization by which we managed to enable slaves to escape into a northern State. He was with me for a while in the war. I happened to save his life once—there was no risk in it to a man of my views, because I then did not care whether I lived or not—but he chose to fancy he was mightily indebted to me, and he would not leave my service, I am sure, for a king's ransom. Well, let us not talk any more about myself, or yourself, or any individual man's trifling adventures."

Clement felt it almost like a rebuke to be thus invited not to talk any more about himself. He had not said a word on that subject, and indeed had said very few words of any kind. But he greatly honoured the loftiness of the principle which Montana enunciated. What did it matter, truly, how men like himself, or even men like Montana, felt or acted, while there was a great cause in the air? Yet he was glad that in the few words Montana spoke there had been even a casual, and of course unconscious, reference to Montana himself. It served to show what high purposes the great leader had, and what noble deeds of personal beneficence and bravery he must have accomplished. Then they talked about the Church of Free Souls, and the kind of work that was being done in the East End—work with which Montana professed much sympathy.

Montana moved towards the table where the letters stood, and placed a chair beside it for Clement, and invited him to sit. Montana himself sat on the other side, and took up some of the letters that were piled on the table. Begging Clement to excuse him, and not to consider himself in the way if he ventured to open some of them, Montana began to apply himself to the contents of a few.

Clement sat and listened and watched with devoted attention. He felt it a great thing to be thus admitted, as it were, to the private business life of the leader. Montana evidently treated him as one of a recognised band of followers, one admitted to know what the chief was doing, and even what he was thinking about. As he opened this or that letter he sometimes told Clement in a word or two what it was all about, and commented on its wisdom or its folly, its relevancy or its irrelevancy to the purposes he had in view. Suddenly Clement's eye fell upon the letter which lay next under Montana's hand. It was addressed to Montana in a woman's writing. Clement thought he surely could not be mistaken in that hand. Never, oh ! never had letter or line been addressed to him by that hand, and yet he had seen it often, and knew it well, and felt sure he could swear to it anywhere. The letter to Montana, he was satisfied, was addressed by the hand of Melissa Aquitaine. Probably it was some commonplace message, some ordinary invitation, some reminder of an engagement. Yet Clement would have longed to see any such missive addressed in that hand to him. For a moment all his old love flashed up within him again. He felt that his cheeks were growing red as he waited, with a nervous anxiety which he could hardly conceal, for the moment when Montana should take up the letter, open it, and read it. Luckily for him, Montana did not appear to observe his embarrassment. Perhaps Montana was not in the habit of observing much that did not directly concern himself. Another moment, and Montana had the letter in his hand. Hardly looking at the superscription, he broke the seal and took out the enclosure. Whatever its subject, the letter was not a brief invitation, or formal reply, or reminder of an engagement ; it was not a lady's mere line or two of civil request to a friend. Pages of manuscript were contained in that envelope. Was it possible Melissa Aquitaine could ever have been influenced by any sense of duty to pen so long a letter ? It was impossible, Clement felt inclined to think, knowing what he did of the girl, and through all his absurd affection for her being fully conscious of her weaknesses and her ways. Yet, as he saw the writing, which he could not help seeing, he could less and less doubt that it was the hand of Melissa Aquitaine.

Montana glanced at the letter and threw it on the table. "There," he said to Clement, "is an illustration of one of our difficulties. We cannot work in a great scheme like ours without the help of women, and yet we are every moment reminded how hard it is to work with them. Their emotions carry them so wildly away. I am for no scheme, in all my thought of the world's development, which

does not keep women in their proper place, and make their impulsive natures subject to the discipline of man. They are great for work when they will do it, but they will follow any emotion, let it lead them where it will. This is a letter from a girl—she tells me she is a girl—who declares herself most anxious to aid hand and heart in our scheme, and yet, like a girl, she goes in a moment into a rhapsody of affection, and devotion, and extravagant love, and all the rest of it.”

“Extravagant love !” The words went through Clement’s heart. But if so, then it was not Melissa Aquitaine. He had been mistaken in the handwriting. “Strange !” he said aloud, and feeling at the same time a keen pang to think that none of this experience of woman’s readiness to pour out her affection had as yet in any way found its path to him ; to him who was so ready to receive it, so longing for it, come almost from where it might.

“Do you know the writer ?” He held his breath for an answer.

“No,” said Montana coldly. “I don’t know the girl, but she tells me she will write again, and that she hopes some day to reveal herself to me. If I knew her, I would tell her not to reveal herself to me. I have no time for such correspondence as this, and I don’t want to know the woman who can turn aside from a great path to waste her energy in silly outpourings of love. I always have a great deal of that sort of thing. Every man has who goes into any great movement. It is one of our difficulties. The girl is clever, apparently, but she wants discipline. You may read her letter, if you like,” and he tossed it over to Clement. “There is nothing personal in that sort of thing. Emotional girls must be in love with somebody, and they must be exposing their love.”

Clement took the letter in his hand. He glanced over a page or two and then put it down, feeling as if he had done a mean act in even glancing at it, anonymous though it was. He could hardly have read it in any case. The characters swam and danced before him. Yet he saw enough to see that it was a wild outpouring of impassioned love, and frantic, almost servile devotion. The writer loaded Montana with words of affection and homage. There was love, love, love, repeated through every page. It never could be Melissa Aquitaine who wrote in this style ; and yet Clement Hope felt it all but impossible to doubt that the writing he looked on came from Melissa Aquitaine’s hand.

“There are women of a different kind,” said Montana, “women who could assist us and be a tower of strength to us, and we want some such women just now.”

“You know of such women ?” Clement asked half inarticulately.

He did not very well know what he said, or why he said it. He wished to say something.

"I think I know of one. She hesitates a little yet, but she will not hesitate in the end. When work is appointed for men or women, the one for whom it is appointed must do it. Now," said Montana, rising, "we will go to the East End; I will show you the Church of Free Souls, and we will talk over our plans as we go. Do you like to walk?"

"I am very fond of walking."

"I am a great walker," said Montana, "and I don't care about a carriage when I can avoid it. I like to be no better than my neighbours."

They set out for the Church of Free Souls. It was a long walk, and Montana talked a good deal more than was usual with him. He appeared to be pouring confidences into Clement's ears, and yet Clement did not seem to arrive at any particular knowledge of what he was going to do. He heard a great many maxims and phrases which for the time impressed him; and he saw Montana now and again recoil from some explanation, and seem to shelter himself in a sort of cavern of profound thought. In truth, it must be confessed that Clement remained, as regards Montana's general organization and immediate purposes, about as wise as he had been before.

"You, at all events," Montana suddenly said, "will work with us. I knew that from the first."

"I will work with you all I can," Clement answered with some hesitation, fearing lest the answer might lower him in the leader's eyes: "but I have told you of my father. I cannot leave him. I cannot go out with you just yet."

"We are not going out just yet," said Montana, "nor could I ask you to disregard your father's wishes. You can help us here as well as there. The true follower can help anywhere. Above all things, you must have faith. You must trust in me and follow me. I may not yet be able to tell you all I mean to do. But you must believe in me, even if sometimes you have to follow me in darkness."

Some words which the old livery-stable keeper had often read to him came involuntarily up in Clement's mind: "He who followeth Me shall not walk in darkness." But he did not venture to apply them to the present hour and the present leadership, and he thought it all right and proper that Montana should not reveal his whole scheme and organization at once. Besides, this proposed reticence fully **ted** for a certain previous vagueness in Montana's descriptions, **darkness itself clear**—that is to say, explained to Clement

why Montana did not explain himself. The denial of a full confidence from the leader only made the follower's confidence all the fuller.

While leader and follower are on their way to the Church of Free Souls, we may say that that institution was a new church or temple which had suddenly arisen in London. It was not new in the sense of being a modern structure. Indeed, it was one of the very oldest buildings in the very old quarter where it stood. It had gone through many changes. It had been a Quakers' meeting-house, a Presbyterian place of worship, a corn store, a music-hall or singing saloon, and now it was converted back again to something of its original purpose by becoming the Church of Free Souls. It was made all the more attractive to the curious from distant parts because it was so difficult to get at. It stood in one of those mazes of little streets which run off Tower Hill, and from which every now and then you get glimpses of the round-topped turrets and weathercocks of the Tower itself, with occasionally, on a clear day, a flash of the Thames and of the Pool below. The Church of Free Souls had been for some time in the occupation of a sect of very advanced Dissenters verging on to free thought. Under their rule it had, however, its regular forms of worship, not unlike those of any other Nonconformist chapel. But suddenly it had passed into the care of a minister who himself had wandered forth from the Church of England itself, on and on, away and away, into extreme freedom of opinion. Under his inspiration the Church of Free Souls grew into existence. He was an eloquent man, had been a very fashionable preacher in the West End in his time, and the mere fact of his having migrated thus far eastward, and settled himself in the midst of the Minories, and almost under the shadow of the Tower, would have been enough to lend attraction to a new ministration, and to draw a crowd.

Gradually crowds were drawn to the Sunday services, and at certain times it was difficult indeed to get a seat there. There were no pews or divisions or inequalities of any kind. It was a question of first come, first served. You sat where you could ; you paid nothing for your seat, and might give to the collection afterwards if you felt inclined, or abstain from giving if your sympathies did not take a practical form. The church was now handsomely painted and decorated inside, and was hung with pictures, not professing any great accuracy as likenesses, to represent all the eminent religious persons of all the creeds in the world, except the orthodox. There were Zoroaster, whose portrait we may suppose to have been a fancy likeness, and Confucius, and Socrates and Mahomet, and John of Leyden, Hypatia and Joanna Southcott, and many other leaders of

sects or peoples, and eminent public men and women who had supported new movements of various kinds. The doctrine taught in the Church of Free Souls was distinctly eclectic in its nature. It was in some sort a principle of religious averages. It assumed a certain portion of truth and a great deal of philosophy in all faiths everywhere, and it struck a kind of average, and so got, or professed to get, a certain profit out of all together. The preacher usually declined to offer any set opinions of his own, and simply called attention to the "flower of good," according to his own habitual expression, which "blossomed in every faith." He was impartial, and disdained to attribute any superiority to one over another. On the other hand, he positively declined to see any particular advantage in any of them, but, culling some leaves from every plant, he offered them to his congregation that they might infuse all together, if they thought fit, and so make a sweet kind of syrup of their own brewing for the nourishment of the soul.

The minister in charge of this temple was as liberal with his pulpit, or we should say his platform—for he disclaimed and contemned the use of a pulpit—as he was with his religious opinions. He offered the advantages of an audience and a platform in his temple to any remarkable person who came in the way and desired an opportunity of addressing such a crowd. Many an eminent stranger, who in his own country would as little have expected to be invited to address a congregation as to figure on the tight-rope, found himself, on arriving in London, favoured with a graceful invitation to communicate some thoughts on spiritual matters to a yearning congregation desirous for all forms and moods of truth in the Church of Free Souls, near Tower Hill. The audience that gathered there were naturally eclectic, not to say motley, in their constitution, as were the doctrines to which they came to listen. Great ladies from the West End came in their carriages, and were interested in the whole affair almost as much as if it were Hurlingham or the Zoological Gardens. Strangers of almost all sorts came, regarding the church as one of the sights of London which ought to be seen. It had been described over and over again by the correspondents of all the American papers from New York to San Francisco. Numbers of eager-eyed mechanics from the East End came and sat there and listened earnestly, hoping to hear something which might fill them with better and brighter views of life than those which they could evolve from their own dull, hard daily experience. Young men and young women from a class just one degree above that of the artisan; young men and young women probably who assisted in the poorer kind of shops, and who

were noticed among their fellows for their sober ways and the intense anxiety with which they looked at all the problems of life ; these formed a goodly part of each Sunday's congregation. Some deeply thinking men and women came there with a faint hope that they were about to hear something which really might open on them a new view of the relations of life, and they went away for the most part disappointed.

It was a long way to the Church of Free Souls. Clement had not been there before, but he remembered having seen Montana come to meet them when the girls and he were walking round the Tower garden, and it did not seem to him now that Montana was taking the shortest way to bring them to the place. At least, Montana now certainly brought Clement on to Tower Hill by a way which appeared to Clement to take them a little out of their road, and which did afterwards in fact oblige them to retrace their steps. When they came to Tower Hill, Montana crossed the road to the path round the railings, and there began to pace slowly along with Clement, very much as Clement had done with Geraldine and Miss Marion on the memorable day when he first saw Montana. Not many days had passed since that day, and yet it seemed to Clement that already an entirely new chapter had opened in his life. They walked round and round by the railings, Montana talking sometimes in his vague oracular way, and sometimes remaining silent for several minutes.

Suddenly Montana said, without looking at Clement, and talking as if he were communing with himself, " Yes, there are women who could assist a work such as mine."

Then, looking round at Clement, he asked, " Have you known Miss Rowan long ?"

There was a tone of unwonted eagerness, or at least something remotely approaching to eagerness, in the question, which was unlike Montana's usual way of speaking.

" Oh no," said Clement, and he felt that his colour was deepening, " I saw her for the first time within the last few days."

" But you have known Miss Aquitaine for some time ?"

Clement had much difficulty in keeping an unembarrassed manner when he answered that he had known Miss Aquitaine and her father for a long time.

" She has not the same force of character," said Montana. " She is not a woman to create a career for a man. But perhaps you think she is ?" he suddenly said, changing his tone, and looking at Clement with a not unkindly smile.

"No," said Clement, with a sudden earnestness which was forced from him, "I don't think anything of the kind."

He did not, indeed, think so any more.

"Come," said Montana, "it is time for us to go to the Church of Free Souls. It is not far from this;" and they went their way at once, and no other word was spoken until they reached the place.

CHAPTER XII.

"THE DESIRE OF THE MOTH FOR THE STAR."

How was it with Melissa Aquitaine when an air ground out on a barrel organ could bring tears into her eyes—she who had never been supposed to know one touch of sentiment? The air that now moved her thus, and made her put down her pen as she sat writing in her room, was not a dirge, or a sad appealing hymn, or a piece of melancholy music of any kind. It was the air of a comic song, a vulgar music-hall song. We are strangely apt to fancy that melancholy sensations are wrought only by music that is melancholy. To the vast majority of people, the feeling the music inspires is far more often one of association than of art. Something suggested by the air, some connection which is in our memory with past time or a lost friend it is, and not the nature of the strain, which touches our heart, and strikes "the electric chain wherewith we are darkly bound." The village lad enlists and goes to the war, and is killed, and his sweetheart is made melancholy for years after by the first sound of "Tommy, make room for your uncle," on the barrel organ, because he used to whistle it, and he is dead. The young wife who died long ago used to amuse her husband by rattling off on the piano the inspiring notes of "Champagne Charley," and the Charley of that day, now grown a middle-aged man, is made instantly melancholy by the sound of that ridiculous air, although he could hear without outward sign of emotion the most devotional passage of the sublimest oratorio, or the soul-piercing pathos of "Che faro senza Eurydice." It so happened that a common music-hall ballad now touched Melissa's heart and made her eyes wet. It was some ballad that she suddenly remembered having heard her nurse sing for her in days long ago, that now seemed to her long ago, when she was still a child; days not particularly delightful or romantic in themselves; but still, days when nothing troubled her; and now something was troubling her. She used to be a disagreeable little child

enough in those days ; and the possibility that she had been so began now to occur to her somehow. She began to doubt whether she had been exactly all that she might have been to those around her. New feelings coming up within her were beginning dimly to reveal to her the possibility of other people having feelings too—a matter which had not previously occurred to her mind. She was unhappy, poor little girl ; and the air she heard grinding itself out on the barrel organ spoke to her of a time when she never thought of either herself or any one else being unhappy. So she put down her pen for a few moments and felt the tears come into her eyes.

“What a fool I am !” she said bitterly and aloud, and she went on with her writing again. She wrote in a hurried way, rapid by fits and starts, and then stopping for a long time to think over what she was to say next, and tearing up a good deal of what she wrote, and thrusting the torn scraps into the pocket of her dress, as if she would not have even those fragments seen of common eye. She was so much absorbed in her work that she did not hear the sound of a quick, light tap at the door, and then the opening of the door itself. Her father quietly entered the room. As she had not heard him, he would now surprise her by his coming. He stole behind her chair and put both his hands over her eyes.

Melissa cried out at once, “Papa !”

“How did you know it was I ?” Mr. Aquitaine asked, setting Melissa’s eyes free to look out upon the world, which they did at that moment with a somewhat startled look in them.

“Oh, I knew the touch of your hands very well ; and besides, there was nobody else who would come in such a way.”

She did not seem, he thought, as glad to welcome him as he usually found her, and she hurriedly shut up the blotting-book in which she had been writing.

“What have you been doing, Mel ?” he asked, after having given her a loving kiss.

“Oh, nothing, dear,” she said, “nothing.”

“Something, surely. What have you got in your book ? What have you been writing ?”

She got up petulantly, opened the book, took a sheet of paper out, and began to tear it in pieces. Mr. Aquitaine was looking on with perfect good humour, and did not even appear to notice the anger that was in her face.

“I do believe, Mel,” he said, “you have taken to writing poetry ; come, confess you were trying your hand at verses ; do let me have a look.”

"No," said Melissa, still with an embarrassed air, "I was not writing poetry. I can't write poetry. I can't write anything worth looking at."

"An essay on woman's rights, perhaps? I should like very much to have a look at it."

"You know I don't care about woman's rights," said Melissa, "or woman's wrongs either."

"Well, I never thought you did much; but one doesn't know what may have come about lately under the guidance of Montana."

Melissa looked up at him, a sudden light of wonder in her eyes, and then she looked down again.

"No," she said, "I have not advanced in woman's rights any farther than I was."

"Then," said Aquitaine, "it must be a novel. You are beginning a novel. It is something or other about which you don't feel quite certain, and you are afraid to have it seen by any one while it is yet a project. Never mind, girl; I know they say children and fools should never look at unfinished work, and so I shan't ask to look at yours. But I have no doubt it will be something remarkable when it does come out. Only, if it is going to be a very long piece of work, don't you know, Melissa, I think you'll never finish it."

"Do you think I am meant for the early and silent tomb?" said Melissa, with an attempt to be lively.

"No, not a bit of it; but I think you are a very lazy and capricious little girl, and that whatever you begin you certainly won't finish, if it is to be more than a page. If that were a letter, now—I dare say you could finish a letter, provided it were not too long; but I despair of your ever getting as far as the middle of the first volume of a romance. Besides, I don't know what you would do for a hero. I don't believe anybody is a hero in your eyes, not even I myself, Mel. Come, confess you don't think me an heroic figure."

"Girls don't want heroic figures for their fathers," said Melissa.

"No, I suppose they don't. It would be rather uncomfortable to have an elderly hero always hanging about the house, would it not? But you have a hero, then, for your love romance?"

"I am not doing any love romance," said Melissa. "How can you be so tiresome?"

"Very well, girl, let it be," said the good-natured Aquitaine: "just now I want you to do some less attractive business; I want you to come with me and make one or two calls."

Melissa moved uneasily about the room, and still seemed dis-

tressed as to the fate of the torn paper which she held crumpled in her hand.

"You haven't got a waste-paper basket," said Aquitaine, "and don't know what to do with your rejected MS. My dear, you must start a waste-paper basket instantly if you are going in for the business of writing; you will find nothing so important as the waste-paper basket, and it will be just as well you should fill it yourself in anticipation, and so save the editors and publishers the trouble; they will do it if you don't."

"I haven't a waste-paper basket, and there isn't a fire, and the thing is neither worth destroying nor keeping." Nevertheless, she did not throw away the paper that she held in her hand. "Very well, dear," she said; "if we are to go out, I shall be ready in a moment."

"In a moment!" Mr. Aquitaine echoed. "Very well; I will read a few of the newspapers. I have not begun them this morning, and your moment will give me time for a good steady read through the lot of them." He took a newspaper and settled himself down. Melissa meanwhile crept out of the room in the quietest way, eager to get to her own chamber.

Mr. Aquitaine was too unsuspicious a man to be roused to any sense of distrust, even by the girl's evident embarrassment. He took it for granted that she had been writing some letter which she did not care to finish when once she was interrupted, and he did not really fancy that she was starting on the business of authorship. A man more keen-eyed than he might have thought that there was something in the girl's evident determination not to part with the torn paper she held in her hand. But even if Aquitaine had suspected what she was doing, or had insisted on seeing it, it is not likely that much change would ultimately have been made in the conditions with which this story has to deal. Melissa was a resolute little person, sure to have her own way in the end, and to walk whatever road she marked out for herself, no matter to what goal it conducted.

On her rapid way upstairs Melissa literally ran against Geraldine Rowan. Her excitement and agitation did not escape Miss Rowan's notice.

"Whither are you flying, and what have you got in your hand, you breathless child?" Geraldine said, playfully holding the girl; "what torn document is that?"

"I don't know," said Melissa, "and I don't care. I wish every one would not frighten and torment me. What is it to anybody

what I write or whom I write to? I am not sending it, anyhow—there!” and she tore the paper into scraps ever so much more minute than she had done in her first excitement, and then she burst into tears.

“Something is going terribly wrong with you, my dear little girl,” Geraldine said; “and I am a very determined friend, Melissa, when I want to be a friend at all. Come to my room, or I will go to yours; let us talk for a moment or two. I will not ask you to tell me anything if you don’t wish; but if you could at all bring yourself to make me your confidante, I think it would be good for you. I am a very faithful friend, and I know that something is troubling you lately that you want to conceal. Why don’t you speak to your father?”

Melissa was now allowing herself to be led quietly along the passage towards Geraldine’s room. She made no answer, and was only trying to prevent her sobs from being heard. They got into the room, and Geraldine carefully closed the door.

“Why not speak to Mr. Aquitaine, Melissa?” she said; “he seems to me to be the best of fathers and the best of good companions. I should tell anything to such a man if I were you.”

“I have nothing to tell,” Melissa murmured, still making a feeble effort to keep up her defiant manner.

“But such a change has been coming over you that everybody can see—everybody, I think, but Mr. Aquitaine; people never notice their own family. Girls don’t burst into tears at being asked what they have written without some reason for it. Besides, I can see that something is distressing you. Will you tell Mr. Aquitaine, or will you let me ask Captain Marion to speak to him?”

“No,” said Melissa, “nobody shall speak about me to anybody. I don’t choose to be spoken about. If I have anything to tell I will tell it myself, but I could not talk to my father about it, Geraldine. How can you speak in such a way? I cannot talk to him. I cannot talk to anybody about it.”

“Then, there is something!” said Geraldine quietly.

“Oh, of course there is, if you will have it, if you will insist upon it. Of course I know you have been wondering about this for ever so long. Well, there *is* something. I am a very silly girl, that everybody knows; and I have been making myself more silly of late than I do believe even Providence intended to make me. Look here—yes, I think you are a true friend, and I like you—or, I don’t hate you; not more, at least, than I hate most people, as I do. I don’t like you, perhaps, although I said I did just now; still, I don’t hate you more

than I hate everybody. I like you better than the rest of them, than—I don't know what. Yes, I will tell you. I have been——” Then she stopped. She looked curiously into Geraldine's face, and said, “I wonder what you will think of me when I tell you? and I wonder what a girl like you, with a well-regulated mind, is likely to say?”

“But, my dear,” said Geraldine, “I have not a well-regulated mind ; I am always so impulsive, so foolish, and speaking out my mind too freely ; and talking to everybody as though I were his, her, and their friend, and altogether comporting myself in the most gushing manner. I am not at all a girl of a well-regulated mind. Sydney Marion is, if you come to that. She has a well-regulated mind, but I should not expect you to rush into confidence with her. I rather appeal to you by virtue of the sacred bond of sisterhood of the ill-regulated.”

Geraldine was endeavouring to make the matter as light and easy as she could.

“Well, then,” said Melissa, “I am in love ; that's all.”

“I thought as much ; but is that all?”

“No, that is not all,” said Melissa, “if you will have it : I am in love with a man, and I have told him so.”

“You have not written to him to tell him so?” said Geraldine.

“Haven't I, though?” Melissa asked, growing defiant and saucy in her despair. “You bet, as all you Americans say—don't they all say ‘you bet’?—well, then, you bet I have ; yes, I wrote and told him so.”

(To be continued.)

A NATIONAL SCARE.

A FEW years after Charles the Second had been restored to the throne of his ancestors, a war, disgraceful in its origin, and doubly disgraceful by the marked incapacity with which it was conducted, was forced upon the United Provinces.

The prosperity of the Dutch, their commercial rivalry with the English, and their superiority in every department of trade, were viewed with extreme jealousy by our merchants. It was hoped that the commercial predominance we could not obtain by superior industry and ability might be attained by superior strength. Charles, who thought he saw a prospect of filling his rapidly emptying treasury, and who hoped, by defeating De Witt, the Grand Pensionary, to reinstate the young Prince of Orange on the throne, and thus bring the States to a dependence upon England, had no objection to the war. His brother, the Duke of York, who hated the Dutch because they opposed a new African company of which he was the head, and who wished for an opportunity of gaining distinction, cordially sided with the war party, and did all in his power to rouse the languid Charles to action. Parliament, acted upon by the avidity of the mercantile classes, voted for hostilities, and were generous in furnishing supplies. Satisfaction was demanded from the Dutch for imaginary grievances ; redress was refused, and war declared.

On the first victory of the English navy—for, in the earlier engagements, fortune was auspicious to the fleet of Charles—France, who had no desire to see England's dominion over the seas supreme, united, in spite of all entreaties from Whitehall, with the States-General. A third enemy now appeared upon the scene. Denmark, with a double dealing which plainly indicated her contempt for Charles and his Government, quickly followed the example of the policy of Versailles, and proved a most irritating thorn in our side. Thus alone, England had to bear the brunt of the storm her guilty greed had raised. It was easy to predict the end of this unequal contest. The victory of July 25, the bombardment of Brandaris, and the prizes in the road of Vlie which had fallen to the English

fleet at the beginning of the war, soon gave way to Dutch triumphs. Before the fierce determination of the Hollanders for revenge, before the discipline of De Ruyter, and before the counsels of De Witt, the navy of Charles, badly officered, badly victualled, and badly manned, had speedily to change its offensive proceedings for those purely defensive. Then a further humiliation had to be accepted, and the bully had to play the suppliant. The proud country, but a few years before the terror of Europe, had now need to repent her rashness and sue for peace. Negotiations with regard to the termination of hostilities were entered into at Breda, and the proposals of Charles discussed by the assembled French, Danish, Dutch, and English plenipotentiaries.

Meanwhile De Ruyter, ignorant or regardless of these diplomatic proceedings, determined to press to the utmost the advantages he had gained. Thanks to Republicans like Algernon Sydney, who had taken up their abode at the Hague, and who were among the bitterest foes of the policy of the English Council, the Dutch admiral knew that his enemy—with her captains incompetent, her sailors unpaid and half-starved, and her navy greatly reduced in strength—was incapable of effecting any formidable resistance, and that he had only to strike rapidly and decisively to establish himself as complete master of the situation. He resolved upon teaching England a lesson such as she should not easily forget, and to give her a fright such as she had not experienced since the days when the “Armada” was sighted off the Lizard. Accordingly he issued orders for his fleet, then riding at anchor in the Zuyder Zee, to bear up towards the east coast of England, and to blockade the Thames. At midday, June 1, 1667, his ships quitted their moorings, and once again in our history a hostile squadron was to stand out to sea to menace our shores.

These preparations created no little consternation in the minds of the Council at Whitehall. Charles, anxious to save all the money he could for his own pleasures, and feeling assured that the negotiations at Breda would be satisfactorily settled, had taken the first opportunity, when peace was proposed, of cutting down his naval expenses. He had written to the Duke of York, as Lord Admiral, not to keep in pay such third-rate ships as had been ordered to be maintained, to discharge all men-of-war which required considerable repairs, and to lay them up in Portsmouth, and to retain “only a squadron of small ships to distract the enemy and disturb their trade.” At the same time Sir William Coventry, a Commissioner of the Admiralty, was instructed to request the Navy Commissioners to reduce the crews of the fire-ships then stationed at Portsmouth,

Dover, Harwich, and Chatham, and to leave them "only a sufficient number to do service, or at the most so many as may suffice to weigh their anchors."¹ The same absurd policy of disbandment and reduction before peace was definitely assured, was also adopted in our military establishments. The garrisons which guarded our ports were ill supplied with ammunition, the forts along the coast were unprotected, and volunteers for active service discouraged. "The Dutch are known to be abroad," moans chatty Sam Pepys, "with eighty sail of ships of war and twenty fire-ships, and the French come into the Channel with twenty sail of men-of-war and five fire-ships, while we have not a ship at sea to do them any hurt with, but are calling in all we can, while our ambassadors are treating at Breda, and the Dutch look upon them as come to beg peace, and use them accordingly."

When, however—thanks to the escape of French prisoners from Rochelle, and to the return of fishing smacks—it began to be definitely ascertained that the country was threatened by a Dutch invasion, less insane measures were put into operation. Every one was struck with anger and terror; trade was at a standstill, and outward-bound merchantmen hastened back to the nearest English port for shelter. The Council roused itself to action. Lord Arlington sent despatches to the Lords Lieutenant of the eastern and southern maritime counties, requesting them to give orders to the militia of their respective shires to "be in such a readiness that upon the shortest warning they may assemble and be in arms for the defence of the coast, in case of any attempt or appearance of the enemy's fleet; taking care in the meantime that the several beacons upon and near the coast be duly watched by the respective hundreds in which they are, for the preventing any surprise or sudden descent of the enemy." They were also to present an imposing, even if hollow, front to the foe. "His Majesty," continues Arlington, "commands me particularly to mind you that, in all places where you shall be obliged to make head or appear to the enemy, you make the greatest show you can in numbers, and more especially of horse, even though it be of such as are otherwise wholly unfit and improper for nearer service, horse being the force that will most discourage the enemy from landing for any such attempt." Fire-ships were hastily collected and fitted with ingredients from the Tower; whilst competent men were to be pressed into the service without the authorities staying for warrants or orders. "The time

¹ *State Papers, Domestic.* Edited by Mrs. Green. May 24 and 29, 1667.

will not permit the observation of these forms ; pray use all possible despatch," writes Sir W. Coventry, who a few days ago was suggesting reduction. Along the coast the militia were rapidly getting under arms, and the Deputy-Lieutenants of Kent, acting in conjunction with the governors of the different forts, were arranging the best measures for defence. The Lord-Lieutenant of Essex was ordered to send to Lee such of the troops as were not already despatched to Harwich. Half the militia of Hertfordshire were ordered to Barnet. Half the militia of Surrey were marched to Southwark and Lambeth, whilst the other half were commanded to hold themselves in readiness at the shortest notice. The men of Wiltshire and Berkshire were sent to protect the Isle of Wight, those of Dorsetshire to Portland and Weymouth, whilst a detachment from Hampshire was told off to Portsmouth. At Harwich the young Duke of Monmouth, with a large body of the aristocracy and the country gentry, was on guard, awaiting the arrival of the Dutch. The fortifications along the coast were under the special inspection of the Duke of York. Sir Edward Spragg, nicknamed the "Irish Papist" by the people who hated him on account of his religion, protected the Medway. At Gillingham a strong chain was thrown across the river, and beyond it lay the King's ships. To complete the measures adopted for the safety of the country, orders were issued that no accounts should be printed of the whereabouts of the men-of-war, nor any news circulated except under directions from Government, "such a course being dangerous when the enemy are masters of the seas."¹

Undeterred by these preparations, the squadron of De Ruyter bore up towards the coast of Kent, and the thunder of his guns could be plainly heard at Harwich and Dover, bombarding some helpless village or maritime hamlet. The following account of the proceedings of the Dutch "in the river of London, and in the haven of Chatham, and the Isle of Sheppey," is from a curious journal printed at Amsterdam, a copy of which is now amongst the State Papers.²

"The Dutch fleet," it begins, "set sail June 1, 1667, under command of Lieut.-Admiral de Ruyter. On the 4th a heavy storm arose from the south-south-west, by which some ships were forced to cut their anchors ; but on the 7th they again came safely to anchor

¹ *State Papers, Domestic.* June 4-10, 1667.

² *Ibid.* June 13, 1667. "Description of the attack made by the Dutch fleet on the English ships in the Thames at Chatham and the Isle of Sheppey, and of all their proceedings from June 1-13, with a plan of the Thames and an engraving of the engagement."

before the river of London. On this the Admiral put out a signal for all the principal officers to come on board and hold a council of war, how they might best sail up the river of London, with some of the lightest ships, to see whether they could there take some of the King's ships. Thereupon on the 9th seventeen ships of war, four advice boats, and four fire-ships sailed up the river Thames, under command of Lieut.-Admiral Van Ghent, with whom went de Witt as deputy of their High Mightinesses the States General, in the ship 'Agatha.' The same evening they arrived between Queensborough and Gravesend, but there being nothing to be done there, on the 10th they came back to Queensborough, where De Ruyter had sent some ships to support them.

"Having returned to the river of Rochester, conquering the Island of Sheppey and Queensborough, a stronghold lying thereon, they thought good to attack the fort of Sheerness, which the English were beginning to make, a little while before, for defence of the passage to Rochester and Chatham. Our cannons so stormed the place that the enemy left it, before Colonel Dolman, who had been sent for by some messengers, had arrived.¹ Our people found there an entire royal magazine, with heavy anchors and cables, and hundreds of masts. Our people took on board the ships as many of the cables, masts, and round woods as they could, and they also acquired fifteen heavy pieces, shooting balls of 18 lbs. ; the rest was destroyed or rendered useless, and the magazine burnt. The damage done to the English at this island was estimated at more than four tons of gold. It is a beautiful and fruitful island. Every one was strictly forbidden, on pain of heavy punishment, to injure the inhabitants in life or goods."

Sheerness in the hands of the Dutch, De Ruyter pursued his victorious progress by sailing up the Medway to bombard Chatham, and to attack the King's ships riding at anchor, to guard the invulnerable chain that had been thrown across the river.

"On the 12th," continues the Dutch journal, "the wind being east-north-east, the Hollanders sailed before the tide about four miles up the river of Chatham, under command of Thomas Tobias. There they made a severe attack. Before their coming the English had sunk

¹ "June 11th.—This morning Pett [ship-builder to the Admiralty] writes us word that Sheerness is lost last night after two or three hours' dispute. The enemy hath possessed himself of that place ; which is very sad, and puts us in great fears of Chatham."—*Pepys' Diary*.

"Sheerness Fort was not in posture of defence, for the which Sir R. Spragg is much blamed." To Lord Conway.—*State Papers, Domestic*, June 15, 1667.

there seven fire-ships, and enclosed the river with a thick and heavy iron chain running on pulleys, which turned on wheels. Six of their ships, distributed in good order, lay before the chain ; at the one end lay four, and at the other end two stout frigates, which crossed the water." And now humiliation was to be in store for the English. "With more than mortal boldness," the journal goes on to record, "the Dutch made an attack against all these dangers. Captain Brakel offered himself, and attacking with his frigate an English frigate called the 'Jonathan' of forty guns, took it and burnt another English frigate by means of a fire-ship ; then the other four ships were left by their comrades, the crews in confusion sprang overboard, and our people took the ship 'Royal Charles,' fitted to bear one hundred pieces of cannon, and with thirty-two guns on board : it was formerly commanded by the English Admiral Monk. Nothing more costly has been made in England, and it must have cost almost 100,000 dollars in the gilding alone. They also took the 'Charles the Fifth,' which with two others of the largest ships, the 'Matthias' and 'Castle of Honingen,' are burnt. The chain was burnt into pieces, and all within it destroyed and annihilated : so that the English lost the Admirals of the red and white flag, besides others of their largest ships, as the 'Royal Charles,' the 'Royal Oak,' the 'Loyal London,' the 'Royal James,' which they had sunk, the 'Matthias,' the 'Charles the Fifth,' the 'Castle of Honingen,' and two stout frigates, the one named the 'Jonathan' ; besides two other large ships and a good number of fire-ships, which they had sunk to stop the passage. On land our people did not do much, for all was in commotion, and the English with 12,000 men came against them in arms ; so the Dutch abandoned the places which they had taken and came again with their ships into the river Thames. Vice-Admiral Van Ghent was personally present throughout, and with other brave heroes of our fatherland manfully forwarded this great work. God keep them henceforth and give them yet more success in their actions, that beloved peace may again descend from heaven upon us, and pride be put down."

The merchants' ships they will burn ; oh tell
How first he should guard his own shores well !
For rumour reports, all the country over,
That the wolf was burned in his own cover.

This version of England's defeat, though written by the enemy, is substantially true, and amply borne out by the rest of the correspondence before us. Letter after letter was despatched from Chatham to Whitehall, and all told the same sad tale ; the Dutch had

forced the chain at Chatham, had with little opposition burned several of the finest ships in the English navy, and had carried off the "Royal Charles," the pride of the fleet, as a trophy to Holland.¹ Yet the victory of the Dutch is not such a matter of surprise, when we learn how ill supplied the English were with the means of resistance. "You may wonder," writes Captain Neville to his brother at Rome,² "our block houses did so little service against the Dutch; but their Captains, being questioned, are come off well, having made it appear that they have long since made their defects known to the Council. Some wanted guns, some platforms to mount them upon, and carriages, others bullets, others had bullets too big for their guns. The answer from the Council was, they needed not to trouble themselves, for the peace being as good as concluded, they would not order any more money to be issued." The honour and fame of his kingdom were trifles utterly beneath the notice of the idle and voluptuous Charles. "Sir H. Cholmly," writes Pepys, "came to me this day and tells me the court is as mad as ever, and that the night the Dutch burned our ships the King did sup with my Lady Castlemaine, at the Duchess of Monmouth's, and they were all mad in hunting of a poor moth."

The country, however, did not regard this national disgrace with the indifference of the Court. Apart from the shame which ignoble defeat must ever occasion in the patriotic and the high-minded, Englishmen, impoverished and defenceless, knew not to what bitter ends the Dutch might yet press the victory they had gained. "Was England," men asked, "which had wrecked the Armada, only to have escaped the Spaniard to become the victim of the hated Dutchman?" The greatest excitement prevailed, and the temper of the people was in one of its ugliest moods. "The members of the Council," Pepys tells us, "were ready to fall together by the ears at the Council table, arraigned one another of being guilty of the counsel that brought us into this misery by laying up all the great ships." Clarendon, the Lord Chancellor, who had advised the sale of Dunkirk, the fortifying of the useless Tangiers, and the marriage with the sterile Catherine of Portugal, had his windows broken and his trees cut down; a gibbet was painted upon his gate, "and these three words writ, 'Three sights to be seen, Dunkirke, Tangier, and a barren Queene.'" The sailors, whose pay was in arrears, and who heard of their King lavishing vast sums upon the ladies of his harem,

¹ *State Papers, Domestic.* See Letters to Lord Couway and Sir J. Williamson, June 14 and 15, 1667.

² *Ibid.* June 20, 1667.

threatened to desert to the Dutch, whilst their wives walked up the streets crying out in front of the offices of the Navy Commissioners, "This comes of your not paying our husbands, and now your work is undone or done by hands that understand it not!"

In the City men knew not which way to turn, so paralysed were they by fear and confusion. "The merchants are undone," writes one John Rushworth.¹ "Our great bankers of money have shut up their shops. People are ready to tear their hair off their heads. Great importunity hath been used at Whitehall for a Parliament, and more particularly by Sir George Saville, but nothing will prevail; there is one great gownman against it, and all the bishops and papists, and all those who have conjured and cheated the King. News came this day to the King, that the French are come from Brest and appear before the Isle of Wight; some at court give out that they are friends and not enemies. We expect the Dutch as far as Woolwich. People are fled from Greenwich and Blackwall with their families and children. We are betrayed, let it light where it will." The agent of Lord Conway takes the same desponding view of matters, and thus writes to his master:² "Upon the first attempt of the Dutch at Chatham," he says, dating his letter from London, "here was such an astonishment upon men's hearts, that every one went to his goldsmith to recall his moneys, but they were all sent back empty-handed, and the King was forced to set forth a declaration to save the said goldsmiths from being so much persecuted as they were. Since that, people's hearts are a little better settled, though we still lie under the same prejudice of uncertainty as before. As to matter of peace from Breda, 'tis written that the common people in Holland are so satisfied since the late loss and disgrace, never to be forgotten by us, that they talk no more of peace, but on such high terms as I hope we are not yet so low as to submit unto them, though I confess we are lower already than I did ever fear to see poor England, and in such a strait as we know not scarce how to help ourselves. . . . Never was England brought to such an extremity, never so benumbed with such a lethargy, that, seeing our enemies so watchful, so providing, and at last so provided, we still were so resolvedly blind as not to endeavour the prevention of those miseries which almost every eye could have easily foreseen; but the observation of the old heathen takes place: *Quos Jupiter vult perdere prius dementat*. However, after all this complaint I will yet hope that God will have

¹ *State Papers, Domestic*. See Letters to Lord Conway and Sir J. Williamson, June 15, 1667.

² *Ibid.* June 29, 1667.

mercy upon us, and that we may once more be in a capacity to defend ourselves and to terrify our enemies."

As is always the case when disaster overtakes either a nation or an individual, rumour exaggerated the evil. It began to be reported that not only had the Dutch burnt Chatham, but that they had also burnt Queensborough, Gravesend, Harwich, Colchester, and Dover; that the French were massing their forces at Dunkirk for the invasion of England; that there were traitors not only in the Council, but amongst the troops drawn up to defend our shores; and that the King, disgusted and intimidated, had fled from his throne and gone no one knew whither.¹ The contents of the State Papers of this time reveal to us the agitation that prevailed in the provinces. "When we heard," writes one Watts from Deal to Sir J. Williamson,² "the Dutch were gone up the river, and some of our best ships fired by them, and the 'Royal Charles' in their possession, and little or no opposition, the common people and almost all others ran mad, some crying out we were sold, others that there were traitors in the Council; then the loss of Dunkirk, the dividing of the fleet, the disbanding of the army, the non-payment of the seamen, and permitting so many merchant ships to go out of the land, and several other things were called in question. . . . None abuse their judgment so much as to blaspheme his most Sacred Majesty, but desperate outcries against some great persons who they commonly name. I have several times been in great danger, desiring them out of their passion. Most eminent people of this place have sent their goods to Sandwich or Canterbury." As at Deal, so at Hull. "We are here much terrified," writes Charles Whittington,³ "at the unexpected news of the Dutch firing four of our great ships and taking one, and ten more being in great danger; and some do not stick to say, things were better ordered in Cromwell's time, for then seamen had all their pay, and were not permitted to swear, but were clapped in the bilboes; and if the officers did, they were turned out, and then God gave them a blessing to them; but now, all men are for making themselves great, and few mind the King and the nation's interest, but mind plays and women, and fling away much money that would serve to pay the seamen. This is the seamen's discourse." One Bentham thus makes moan from Lowick: "Lord! that it was possible that after the first tidings of

¹ *State Papers, Domestic.* See Letters to Lord Conway and Sir J. Williamson, June 13, 14, and 17, 1667.

² *Ibid.* June 15 and 18, 1667.

³ *Ibid.* June 16, 1667.

the Dutch fleet coming out upon some desperate design, no platforms were raised, nor sufficient cannon mounted, nor soldiers sent to make a considerable defence! How strangely were all our councillors lulled into a dead sleep of security, that nothing less than so mortal a blow and irreparable a loss could awaken them. Must we be the first that are registered to posterity for casting or giving away our principal arms, both of offence or defence, while we treat with a numerous, malicious, armed, and active enemy?"¹ From Lowestoft and Aldborough, people were hastily removing their goods into the interior. At Yarmouth the sailors were much enraged, and "every one talks at a strange rate," whilst the drums were beating for volunteers to enlist under Lord Townshend. At Lynn, "the news of the burning of our ships by the Hollanders causes strange discourse." At Hull, the people "were afflicted but not daunted, and care was taken to suppress intestine enemies and repulse invaders." At Whitby, "all were much perplexed that the Dutch vapour so publicly in the Thames." At Newcastle, "people were at their wits' ends," and gave up the place as lost. Chester, the head-quarters of the Nonconformists, "was much perplexed. Some said we were asleep, or should have fortified ourselves, knowing the enemy near. All concluded that there was treachery in the business, and hoped the contrivers would receive the reward due to those who betray King and country." At Minehead, "the loss of the shipping in the harbour was resented as the greatest dishonour that ever the King and kingdom lay under, especially when discourses and preparations were but of peace." At Plymouth "the news of the Dutch fleet lying in the Thames makes many look sadly." Throughout the correspondence, anger, astonishment, fear, patriotism, and a longing for revenge are uppermost in the different writers' breasts. Bristol,² owing to the number of disaffected persons it harboured, appears to have been the only port which showed itself favourable to the enemy.

Fortunately for England, De Ruyter failed to take advantage of the victory he had gained and the panic he had created. The forts of Gravesend, Tilbury, and the Tower, ill-supplied with ammunition and out of repair, alone stood between him and London. Had he issued orders for his ships to sail down the river, nothing could have prevented the capital from falling into his hands. These instructions happily for us—whether he feared the vessels sunk off Blackwall to

¹ *State Papers, Domestic.* See Letters to Lord Conway and Sir J. Williamson, June 16, 1667.

² *Ibid.* June, 1667.

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1. The first of these is the fact that the Commission has not yet received any information from the Government of the United States regarding the results of its investigation of the activities of the American Friends Service Committee in the Philippines.

occasions in this time of public danger ;” nor did His Majesty doubt “but that your endeavours, which we assure ourself you will engage to the utmost, will meet with so much loyalty and prudence in them as easily to produce what we reasonably expect, a speedy and cheerful compliance with our necessities in this so important a juncture of affairs.”¹

When the squire and poor vicar were appealed to, it was not probable that so wealthy a corporation as that of the East India Company would escape. Accordingly, a circular was addressed to the directors, applying to them “for a present loan of £20,000 for the use of our navy ;” and “such is the importance of this conjuncture, that we cannot think you will wonder if we be more than ordinary pressing in this desire, in which you will do us a very seasonable service ; and we assure you it shall, upon occasion, be readily remembered to the advantage of your Company, in any its concerns wherein you shall have need of our royal favour and protection.”² Yet, in spite of the urgency with which he pressed these appeals for pecuniary aid, the King declined to set an example of economy. His Court was as extravagant and luxurious as ever. Though he demanded contributions for the maintenance of his navy and for the defence of his kingdom against the enemy, he had always the means at hand to reward a favourite or to enrich a mistress. Surrounded by a terrible distress, with provisions scarce, and coal at five pounds a chaldron, the establishment of the Court was a byword for waste and iniquitous profusion. “God forgive us all !” sighs Pepys. “It was computed that the Parliament had given the King for this war only, besides all prizes, and besides the £200,000 which he was to spend of his own revenue, to guard the sea, above £5,000,000 and odd £100,000, which is a most prodigious sum. It is strange how everybody do nowadays reflect upon Oliver and commend him, what brave things he did, and made all the neighbour princes fear him ; while here a prince, come in with all the love and prayers and good liking of his people, who have given greater signs of loyalty and willingness to serve him with their estates than ever was done by any people, hath lost all so soon, that it is a miracle what way a man could devise to lose so much in so little time.”

Still, in spite of the worthless sovereign then on the throne, the loyalty of the nation declined to be appealed to in vain. The Ordnance Commissioners, who had previously lent £40,000, added to the loan another £20,000. The London citizens offered

¹ *State Papers, Domestic.* June 21, 1667.

² *Ibid.* July 5, 1667.

£10,000 to be spent entirely on fortifying Gravesend, Tilbury, Woolwich, Sheerness, and other places on the Thames; and Prince Rupert, assisted by Lord Craven, was ordered to superintend the proceedings. Instructions were given to fill the magazines at Greenwich and Blackwall with ammunition. Vessels heavily laden with stones were sunk off Woolwich and Blackwall, whilst between Woolwich and London Bridge were stationed "70 billanders, 70 or 80 smacks, and 337 other ships, some great, some less," for the protection of the river.¹ It appears that the owners of these vessels strongly objected to their shipping being pressed into the King's service without compensation, and demanded a month's pay in advance. They were, however, politely informed by Sir Wm. Coventry that "the King hath taken other men's ships and sunk them, and may take theirs also in this case, as justly as the others. The intention at present is only to use them to protect the river Thames; if they be used further, there will be opportunity of timely notice of it, and the owners in that case will have all reasonable satisfaction."² Besides, added Sir William, the proprietors of these vessels should remember that their ships were taken up for the defence and security of their own interest as well as that of others in the river. With this consolation the murmuring owners had to content themselves.

During the last few days a westerly breeze sprang up, and a heavy fog hung like a shroud over the mouth of the Thames. The watchers consequently failed to detect the position of the enemy, but it was rumoured that the Dutch flats were hovering about the east coast, awaiting a favourable opportunity to effect a landing. Consequently, great excitement prevailed at the ports in the neighbourhood of De Ruyter's vessels. At Harwich, several troops of horse and companies of militia held themselves in readiness for action, whilst colliers disguised as men-of-war, with jack, ensign, and pendant, were laid across the arm of the sea from Landguard Fort to the side beacon, with holes cut in their sterns, ready to be sunk in case of the enemy's approach. At Ipswich vessels were anchored in front of the harbour, prepared to be sent to the bottom at the first intimation of a Dutch invasion. Yarmouth was ready for any emergency. "We have here," writes Sir William Doyley to Sir Peter Gleane,³ "2,000 foot and five troops of good horse; if the enemy land, we resolve to sally with 1,000 foot and four troops, to try their metal upon the Downs. If they attack us by boats, we are prepared to make our defence to the utmost. A good ship is ready at the boom to be sunk, if there be

¹ *State Papers, Domestic.* June 13-18, 1667.

² *Ibid.* June 19, 1667.

³ *Ibid.* June 22, 1667.

occasion ; two more are ready to be sunk at the pier head. Our guns are fixed, our hearts are up, and I am confident there's many of the officers and soldiers wish the Dutch were in the road. In my whole life I never saw so much ready resolution in men as I find here." As the fog lifted, it was seen that the enemy had not sailed northwards ; for the present, the object of the Dutch was to prevent the English fleet from holding communication with London ; hence, when the wind was easterly, they anchored in the Thames, knowing that ships could not well come from north and south, but when the wind changed to the west they lay-to between Harwich and the North Foreland.

After a fortnight's inactivity, it became evident that the Dutch were meditating vigorous measures. Part of the fleet stood out to sea, and sailed northward, to intercept the fleet of Sir Jeremy Smith, then on the north-eastern coast ; the remainder, after hovering off Harwich, by a clever manœuvre cast anchor close to Landguard Fort, "a way our great ships never used to venture." In the uncertain light of a summer night, and under cover of their guns, the Dutch landed over 2,000 men, with a strong body of pikes. Lord Suffolk at once marched down to meet the foe, and a severe engagement ensued. Meanwhile, a party of some three or four hundred Dutch ran along the beach, and attempted to scale Landguard Fort. They came briskly up with their cutlasses drawn, crying deridingly, in allusion to the negotiations at Breda, "Peace! peace!" They were, however, met with a severe fire, and, though for well-nigh an hour they repeated assault after assault, were continually repulsed. At last, discouraged and demoralised, they ran away, "leaving some of their ladders, their hand-grenades, and a case of very handsome pistols ; and as the ships saw them within the fort in the Salt Roads they bestowed upon them a bullet welcome." Nor was the force opposed to the Earl of Suffolk more successful. From eleven o'clock at night to two in the morning the English and the Dutch were hotly engaged one with the other, neither side gaining any pronounced victory, until, the dawn breaking, and the tide floating their boats, the enemy thought it prudent to beat a retreat, and run off to their ships. The loss of the English was trifling, but that of the Dutch severe.¹

Thus repulsed, the enemy turned their bows towards Aldborough Bay ; here nine ships cast anchor, whilst the remainder sailed southwards. And now, during the rest of the month of July, we hear of the Dutch fleet appearing at various places, causing the greatest alarm to the inhabitants, yet seldom acting upon the aggressive. For

¹ *State Papers, Domestic*, July 2-4, 1667.

a time they sailed about the Sledway and Bardsey sands, being, we are told, "quiet neighbours, though still having an aching tooth against Harwich." Then they appeared off Plymouth, where De Ruyter attempted to land and steal some sheep, but was compelled to retire, as the coasts were well guarded. After this they anchored in Bigbury Bay, forcing all the militia in Cornwall and Devonshire to rise in arms to defend the coast. Then steering eastwards, they burnt two small vessels at Torquay, and passed the Isle of Wight, "when the people took alarm." Once more they took up their old moorings at the mouth of the Thames, where an engagement ensued between the Dutch under De Ruyter and the English under Sir Edward Spragg and Lord Craven, in which the former were worsted. The English commanders were accused of not having made the most of their opportunity in pursuing the enemy, but vindicated their inactivity by attributing all the blame to the high winds that were then blowing dead in their teeth. "Else, had the weather been favourable, they would have destroyed the whole of the Dutch squadron." This affair was the end of hostilities. On August 24, 1667, the peace with Holland, France, and Denmark was proclaimed. It was received throughout the country with great rejoicings. The national delight is plainly evinced by the bulletins, amongst the State papers, from the different ports in the kingdom, when it became definitely known that the treaty of Breda had been signed. At Weymouth, "the peace as it were raised the dead to life, and made them rich in thought, though their purses are empty, for the town is exceedingly poor." At Lynn "the bells have hardly lain still since the news of peace." At Deal the peace was solemnly proclaimed "with arms and trumpets, and a procession of magistrates and soldiers," amid the cheers of the mob and the thunder from the guns of Walmer and Sandown. News of similar rejoicings were despatched to London from Newcastle, Yarmouth, Margate, Dover, and the chief ports in the Channel. It was hoped, at last, that peace would usher in a reign of prosperity, and the Parliament that was about to be assembled redress the grievances of the past.

We know who was made the scapegoat for the late misdeeds. The Lord Chancellor Clarendon was then the best hated man in the kingdom. To his counsel were attributed the sale of Dunkirk, the stoppage of the seamen's wages, the disgrace at Chatham, and the unsuccessful conclusion of the war. He was offered up as a sacrifice to appease the people, and commanded to resign the seals. His dismissal, however, failed to satisfy the national hate. On the meeting of Parliament he was impeached, and sentence of banish-

ment passed upon him. Among the State Papers of this period there is the following vituperative epitaph on the fallen statesman ; of the numerous bitter attacks of which Clarendon was the subject, it is perhaps the most severe and scurrilous¹ :—

Pride, lust, ambition, and the people's hate,
The kingdom's broker, the ruin of the State,
Dunkirk's sad loss, divider of the Fleet,
Tangiers' compounder for a barren sheet.
The shrub of gentry married to the Crown,
His daughter to the heir has tumbled down ;
The grand affronter of the noble lies
Groveling in dirt as a just sacrifice,
To please an offended king. Abused nation,
Who could believe this sudden alteration?
God is revenged too, for the stones he took
From aged Paul's to make a nest for the rook.²
Those cormorants of State, as well as he,
We more than hope in the same plight to see.
Go on, great Prince, thy people do rejoice ;
Methink I hear the kingdom's total voice
Applauding this day's action to be such
As roasting of the Rump, or beating of the Dutch.
Now look upon thy withered cavaliers,
That for reward have nothing had but tears ;
Thanks to this Wiltshire hog,³ son of the spittle,
Had they been looked on, he had had but little.
Break up the coffers of the hoarding thief,
There millions will be found to make him chief.
I have said enough of linsey-wolsey Hide,
His sacrilege, ambition, lust, and pride.

ALEX. CHARLES EWALD.

¹ *State Papers, Domestic.* August 31, 1667. See also the Preface to the Calendar of this reign by Mrs. Green.

² Clarendon's new house near St. James's was nicknamed Dunkirk House, "from the general opinion of his having a good bribe for the selling of that town," and was partly built with the stones of St. Paul's Cathedral, lately gutted by the great fire.

³ Clarendon was the son of Henry Hyde, of Dinton, Wiltshire.

THE FAIRYLAND OF SHAKESPEARE.

THERE are few of us who have not dreamed of Fairyland. Not in childhood only, when life is so new and strange that all pleasant things seem possible, do we long in the pauses of our noisy play for wilder adventures than have hitherto befallen us, and eerier wonders than any we have chanced upon in forest-glade or fern-brake. Long afterwards, when we have grown less credulous of joy and ceased to wonder greatly at anything, the old wish will return as the children crowd around our knees in the fitful firelight to listen to the old stories. Then it seems that we once stood on the very borders of the enchanted realm, and might well have claimed cousinship with Queen Mab. It is well that we cannot find our way back into her kingdom, where our grave faces would only awaken the merriment of the elves, and our worldly wisdom be the butt of their tricksome mockery. We doubtless feel more at ease in our human homes, and if Titania were to fall in love with us, we might ask only for a "peck of provender," or something as worthless. Yet the name of Fairyland falls softly on our ears as if it had been an early distant home, and all news of it affects us strangely, like the sound of a forgotten language, first heard from the lips of some fond old nurse who has long been dead.

Such news will come to us at times through the prattle of children, the music of Mozart, and some of Mr. Morris's tales; and in old German pictures we now and then catch a glimpse of familiar faces, on which our mortal eyes never rested before. Or who has ever gazed long on Botticelli's "Spring" without feeling that he, too, has entered that enchanted garden, and might have caught a glimpse of those airy dancers had not his eyes been too dim with the world's dust and tears? To all of us in different ways the tidings come of a dream world, ever near and ever distant, a land of greener wood walks and calmer seas, of nobler action, it may be—at least, of fuller satisfaction than ours.

It is this longing for a life with conditions less burdensome than

those to which we are subjected, for an existence in which thought might be more easily embodied in action, and every fancy realised as soon as conceived, that lends a charm to the legends of the people and the lighter imaginings of the poets. Here nature always seems to hint of a beauty which she never fully unveils, and to promise a joy which she is unable to bestow. She saves her sweets till after dinner, when our appetites are gone, or doles them out to us with a chary hand. Nay, she mixes gall with her sugar, and wormwood with her honey, and on our high-tides solemnly rewards us with gilded farthings, which we foolishly mistake for gold till they grow dim beneath our too eager fingers. How if it were otherwise, if all we desire were granted, if all we possess were what it seemed when it was still only a wish? Philosophers and theologians may find a thousand good reasons why this is not so, but it is surely natural that we should at times long to escape into a land where it might be. So we turn to our songs and our story-books.

Yet, as we grow older, we become half impatient and wholly ashamed of such dreamings. We hide the "Earthly Paradise" more carefully from our friend than the last heterodox review from our clergyman; and when we have abstracted a volume of fairy tales from the nursery, we pretend to be deeply interested in solar myths. And to confess the truth, often as we sigh for those flights of fancy which used to be so easy and so sweet, it is seldom we can quite enjoy them. The wings of imagination have grown weak and heavy with long disuse. It is but rarely they will bear us even a little way into the realm of wonder, and then, like chickens that have fluttered over the fence, we are glad enough to return to the barn-door. Even of a summer holiday, when leafy shadows play across the open page, we feel there is something unreal in all these glories and terrors; the dwarfs do not delight nor the giants frighten us as they used to do; the prince's achievements have lost their ancient gloss, and the princesses—ah, they are as lovely as ever; but somehow, they remind us of no living maidens now.

By what strange chance are creeds abolished or retained? We certainly do not cling to the most beautiful, for Puck and his merry and graceful crew vanished long before the churchyard ghost, which may still be met stalking down secluded country lanes; nor to the most reasonable, for, except in our dreamiest moods, we scornfully reject the slightest hint of witchery, and yet find no difficulty in believing that the hero and heroine of the last new novel "married and lived happily ever after" the conclusion of the third volume, without the help of any fairy godmother. The old poets were perhaps as

sceptical as we. They doubted whether any perfect happiness, or nobleness, or love were to be found here ; and as their hearts yearned for them, they pictured a realm of marvels amid which those greater wonders might appear less incredible.

That is the secret of the whole chivalrous poetry of the middle ages. If the passions they delighted in were strongly and delicately painted, the readers and hearers of those days cared little for the probability of the tale. Even if we suppose that they accepted every story of dragons and sorcerers with the unwavering faith which we are accustomed to bestow only on the Bank of England, they doubtless knew far better than we the limits that nature has set to the physical powers of horse and rider, and saw that these were frequently transgressed. To them this mattered but little. Their hearts were full of the love, the valour, or the purity of the hero ; and if the writer could only make them believe in these and see clearly in his character what they dimly felt in their own, they cared little to question the means by which it was done.

In the chivalrous romance of Mediæval Germany—the courtly epic, as it is called by the critics—this spirit is very plainly visible. The knights and ladies of Wolfram's Parzival are no portraits of those who surrounded him, but pictures of what, in their best hours, they desired to become—not by any means perfect men when tried by any code of morality, but only perfectly ourselves. Thus each of the principal characters is a realised ideal ; the differences between them are those of original bent and power of character which determine what each thinks best, not of a more or less perfect attainment of it. The interest of the poem, it is true, centres in the development of the hero's mind ; but this development consists almost exclusively in the expansion of his knowledge and the elevation of his aims. From the hour in which he is knighted to that in which he is cast with shame from the palace of the San Graal, he is constantly what at the moment he desires to be. Then, it is true, a deep self-despair falls upon him, but it is because a new ideal has dawned on his imagination, to which knightly valour and courtesy alone cannot attain. He is like a mariner who has dropped his compass into the ocean, a man who has lost all his aims before his life is half spent. He is left as it seems hopelessly without light and guidance. But of the Apostle's bitter cry, "When I would do good, evil is present with me," of the fevered, futile effort to attain a clearly visible good, to obey a moral law whose authority we do not question, he and the other heroes of these romances know nothing. The incidents, too, serve only to call out and display

the varied qualities of the hero's character ; none check, thwart, or pervert them.

The same is true of the more genial if less powerful Hartmann, the story of whose " Poor Henry " is known to English readers by Mr. Longfellow's " Golden Legend." Here the one object of the earlier poet is to depict the love of the heroine, her half childish, half maiden love for one who is nobler than she, and yet needs her help. In order to do this fully he braves a dozen impossibilities, and he has succeeded. Yet, what is it, after all, but the dream which many a maiden has silently cherished, carried out in an imaginative reality, with an utter disregard of everything that renders the realisation of such dreams impossible amid the stubborn conditions of our human life ?

The aim of Gottfried's " Tristan " is similar, though the love here delineated is of a very different character. All that youthful lover ever dreamed of passionate delight is here, with just enough of sadness to render it the dearer. The old poet let his pen fall before he came to the moment when a swift, sudden, merciful death snatched the lovers away, ere the kisses had grown chiller or the hand-touch colder ; let us hope that a still greater may continue what he has so worthily begun in the " Sailing of the Swallow." But the moral ? To Gottfried and his readers it seemed that the magic wine cup might sufficiently excuse the passion of Tristan and Isolt. Like all the great mediæval poets, he desires not to portray men and women as they are, but a single passion as it might be when isolated from the rest of life and all impeding conditions, and thus allowed freely to grow and blossom. The impossibility of the tale at once freed it from the charge of immorality.

Such, then, was the object of these poets—to escape from the modifying conditions of the real world, to paint every character or passion in its essential truth, and to surround it with the circumstances that would place it in the intensest light. Of all modern English writers, Shelley has the greatest and Fielding the smallest resemblance to them. If we imagine their system carried out on a scale large enough to embrace the whole of life, we have the plan of the " Divine Comedy." Surely no criticism can be blinder than that which sees in the " Inferno " an outburst of personal spite or party malignity. In no poem, the æsthetical premises being once granted, do all the parts follow with a more cogent necessity. The torments which have so often been blamed as too material are only the external shadows of the passions they punish, their very nature made visible and palpable to sense. They are not grand, because sin in

itself is vile, and it is here stripped of all its masks, and placed in a world that is a mirror of itself. Dante may have erred—he doubtless did occasionally err—in his judgment of single characters, but they, being as he conceived them, could find no other doom than this. Nay, they are so doomed now and here, though the modifying conditions and varying interests of life prevent their punishment from becoming so apparent, or being so complete.

And here we may notice the truly wonderful skill with which Mr. Swinburne recalls to our mind the story of Francesca in the first passionate moment of Iseult's love ; thus gaining, as it were, a background of eternal night for his sunny picture, and placing in strong contrast the two noblest imaginative embodiments the Middle Ages have left us of a sensuous love, both of permanent significance and both pure and true, though Dante's is the deeper and more universal truth.

What has been said of his Hell is equally true of his Purgatory and Paradise. It is not strange that so many readers should find the latter insipid. It is only he who has climbed the weary steps of the mountain of purification, and passed through the cleansing fire, that can hope to understand its joys. Nor does the poet attempt to tell us in what the blessedness of the redeemed consists, except in so far as he himself could understand and partake of it. And what could his portion of eternal happiness be, save the continuation of the one unselfish gladness he had known here, that which arises from the contemplation of truth and beauty, the will and the love of God? Much in the "Divine Comedy" of course owes its external form to the popular theology of the poet's day ; but what lends it its enduring value is the fact that he repeats nothing upon hearsay. Nor does he start any question merely to show the subtilty of his intellect. All the doubts that Beatrice solves have been matters of the deepest spiritual moment to him ; nay, when we ponder them long enough, we find that they are the very difficulties that haunt us, and must for ever haunt every earnest man, whatever his creed or the language in which they may be expressed. While dwelling, as no other poet has ever done, on the phenomena of spiritual life, and lending them all a strictly catholic form, he seizes on what is broadly human in each, and so restates it in his verse as to render it at once comprehensible to every reader whose mental experience has embraced the condition itself. To those who, like Voltaire, have no interest in such matters, the whole must of course appear as dull and meaningless as the warmest hues of Titian to the colour-blind.

This implies a poetical genius which the earlier German poets

did not possess. Such tales as "Tristan" and "Poor Henry" needed no interpretation, since they treated of feelings which blossom anew in the springtide of every generation. But poets who dealt with matters more abstruse, and who employed a form which removed them to a distance from all human experience, were obliged to seek for a new means of impressing them on their hearers' hearts and imaginations. Hence their symbolism, which differs widely from allegory. In the latter, the characters are but the masks of abstract ideas ; the better it is, the more transparent these will be ; and such shadows, though they may amuse our ingenuity, cannot greatly interest our feelings. The virtues and vices are too unreal to excite a sigh or a tear. It is only when the poetical talent of the writer makes us forget the hidden meaning that we are moved by the "Fairy Queen" and the "Pilgrim's Progress." But an action or character does not cease to be real when it becomes symbolic. Those who see in the brazen serpent a type of Christ do not therefore believe that it was never lifted up.

Wolfram's "Parzival" may furnish us with some instances of this manner of treatment. An aspiration after a perfect holiness of heart and life has never been a popular passion in any age or country ; nor was it likely to become more generally intelligible by being embodied in the story of a quest for the San Graal. A great part of Parzival's history was therefore likely to seem dull and wearisome to the reader, or to amuse him only by its scenery and incidents. To avoid this, the poet constantly endeavours to recall such moments of our common human experience as may illustrate what lies beyond its limits. The mother of the hero, being anxious to shield him from the dangers of battle, withdrew with him to a lonely castle amid the hills and woods. While caring in all other respects for his gentle nurture, she concealed from him the very names of war and chivalry. But one spring morning he chanced to meet three knights riding down a forest glade, with arms that gleamed and glistened in the sunshine. Astonished by their splendour, he fell on his knees and worshipped them as the Holy Trinity. The significance of all this is too obvious to require comment. On his error being explained to him, he hastened to his mother and demanded the means of being made a knight. She dared not refuse his request, but, hoping that ill usage might drive him back to her, she sent him forth in a fool's dress. Could there be a more touching picture of the way in which a home-nurtured boy enters the world, with a heart that beats so high with generous ambition, and yet clad in so unseemly a garb ? He made friends, as well he might, and the best of these

instructed him, not only in the use of arms, but in courteous behaviour. One of his precepts was that the youth should no longer ask, in his simple, childish way, the meaning of every new thing he happened to see or hear. Parzival treasured these things in his heart, and became a great and famous knight. But long afterwards, when he sat at the table of the knights of the San Graal, he forbore, in deference to those teachings, to ask the meaning of the wonders that were revealed to him, and was next morning dismissed from the castle with shame ; for the wisdom of the world is foolishness with God, and except a man be as a little child, he can in no wise belong to that goodly fellowship.

Thus a great part of the charm which this poetry possessed for its earliest readers lay in the fact that it brought the incidents of their own individual lives into a connection with the leading idea of the tale, and thus lent them a fuller and deeper significance. They found in the adventures of the hero the clear expression of what in their own experience had been so sweet, although so short and dim, as youthful lovers turn to the pages of the poets for words that may justly portray their own emotions. Nay, do not boys and girls, who are just beginning to guess new meanings in each other's eyes, still delight in refinding the loved one in the hero of each foolish favourite tale ?

The employment of such symbolism as has been above described made great demands on that kind of imagination which creates tales and incidents, and with this the Middle Ages were peculiarly gifted. In this respect their whole system of thought seems to have differed most strikingly from our own, for the influence of scholasticism as a mental discipline was confined almost entirely to the schools and cloisters. When *we* desire to understand a thing, we reduce it to its component parts, and state the results of our inquiries as a moral precept or a natural law. Then, exactly the opposite process was pursued. No law or precept was fully acceptable until it had been clothed in at least an imaginative form, and could thus be compared with the other parts of the spiritual or material world. In all that has to do with religion this contrast is most apparent. Now, there is no tale so lovely but we must pull it to pieces for the sake of what little grain of fact or doctrine it may contain ; then, every text blossomed into a story. Robert of Sicily is only such an amplification of "He hath put down the mighty from their seats and exalted them of low degree ;" and the words, "Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto Me," were the origin of a hundred legends, of which the best

known are those told of St. Elizabeth of Hungary and St. Francis of Assisi.

The failure of this creative power was one of the first symptoms of the decay of mediæval poetry. Some of the later writers composed simple allegories ; some adopted an entirely mechanical system of symbolism, in which certain trees, flowers, or even colours stood for the Virgin or the saints. Others endeavoured to excite a stupid wonder by exaggerating the adventures of their hero, and even in this they displayed but little invention or skill. Indeed, the process was generally very simple. If Launcelot had been represented as slaying three knights single-handed, the next singer of Tristram, determined that he should not be outdone, would tell how he drove six before him ; while a third, in re-telling Launcelot's history, would quietly turn the three into a thirteen. Thus the chivalrous romances sunk into the contempt in which Chaucer most justly held them.

But during the life of that poet a new spirit was awakening in Europe. The Renaissance, with its joy in the simple warmth and sunshine of life, its delight in the strength and skill of men and the grace and beauty of women, in action and passion, in all that can satisfy the senses or the intellect, had dawned, like a spring morning, on the world. Its poets found the worn-out forms of mediæval art ready to their hands. Their German predecessors were unknown in the lands on which the new sun was first to rise ; nay, even in their own they were falling into an undeserved neglect. But the old stories were still told, and one of these Ariosto wove into the brightest of all epics, a tale full of life and motion, of colour and music : no castle of the San Graal, it is true, but in very deed an earthly paradise.

At first sight, no two poems can appear more entirely different than "Parzival" and "Orlando Furioso." The one an Alpine height, scarred by tempest, too often a mere sterile waste of rock and coldly glittering snow, whose grand proportions are best seen from a distance, yet with scattered plots of the sweetest wild flowers ; the other an Italian garden, bright with varied blossoming, with statues and fountains, and long ilex avenues of cool and fragrant shade. In ethical respects the same contrast is preserved. In the one the mountain air is chill and bracing ; in the other the sunshine has all the soft, delicious charm of a summer afternoon. Yet they have this important point of resemblance : both are dream-worlds, visions of a state of life and society that never has existed, and never can exist on our earth. The one is the dream of the Middle Ages, full of heroic effort and lofty, if vague, aspiration ; the other that of the Renaissance,

fervid with the keen joy of sense and action, and luxurious with intervals of the dreamiest repose : but the later and greater poet fled as far from the realm of reality, with all its necessary limitations and conditions, as Wolfram had done, though he treated his fairyland less seriously than the German did his more spiritual paradise.

The Reformation had passed over England before our country produced a second poet who was able to learn the best lessons of the Italians. The ethical tone of the "Arcadia" and the "Fairy Queen" is therefore higher, and in this they approach some of the earlier romances more closely ; but they have less freshness, vivacity, and sunny charm than the Italian poem, and are even more unreal. The very emotions they portray have become dreamier, as well as more chaste and courtly. The wild and wayward passions of men are here beatified ghosts, very lovely, but very pale and still. These works are, indeed, as far removed from reality as it seems possible for any true poem or romance to be ; and it is perhaps for that very reason that actual interests are sometimes forced upon us by the writers in a way that is not quite poetical.

The distance which separates Boccaccio and Chaucer, on the one hand, from Ariosto and Spenser on the other, is in many respects greater than that which divides the earlier poets from Shakespeare. Both in the "Decameron" and the "Canterbury Tales" we find the same delight in the facts of life, the same clear eye for realistic detail, which distinguished the English drama of the Elizabethan age. To the great writers of both periods the world around them was full of interest ; they had no desire to escape from it, nor were they inclined to reject anything it contained as common or unclean. They looked upon life, and saw that it was very good. But the interest which was awakened by the manners and actions of men was afterwards concentrated on their characters and passions. While the latter were at first employed only to explain the former, the former were, during the later period, chiefly valued as a means of illustrating the latter.

This development of the spirit of the age is the more remarkable, because we find in Boccaccio, and still more frequently in Chaucer, many traces of a personal leaning towards the later manner. The description of the pilgrims, the quarrel between the Reeve and the Miller, the Wife of Bath's prologue, and, indeed, most of the incidents of the way, are conceived in the spirit of the Elizabethan dramatists. Nay, each of the tales is appropriate to the person in whose mouth it is put, or in some sly way a pleasant satire upon him ; most illustrate the narrator's individuality, by showing on what subjects his

imagination chiefly loved to dwell. But the time had not yet come, nor was the tale the form in which the subtleties of character and passion could be adequately treated.

That was the task of our great dramatists, and the spirit in which they approached it was one of the most single-minded honesty. Masters as they are of all the secrets of dramatic effect, their one object seems to be to understand the whole of human life. They dare the giddiest height ; they shrink appalled from no abysmal depth ; they turn in disgust from no reality, however foul or mean. It is this intellectual courage which lends their work its high moral tone and its manly vigour. With an unerring instinct, which reminds one of Dante's description of the purified will—

Libero, dritto, sano è lo tuo arbitrio,
E fallo fora non fare a suo senno,

each writer seems to have turned to that part of life which especially interested him, and which he was therefore peculiarly qualified to treat ; or, it may be, the sharp voices of the groundlings recalled him if ever he ventured into regions where he was not a master. Hence, even if the plays of Shakespeare were lost, the drama of his age would still present us with a singularly elevated, comprehensive, and faithful picture of human life.

But in that master all the highest gifts of his dramatic contemporaries were united, and that union produced a quality for which we have no name, because it is unique in literature, but which has been called his judgment, his sanity, the "wholeness of his world-vision." Of all our later writers, Fielding is probably the sanest ; the true proportions of life are more clearly mirrored in "Tom Jones" than in any other modern English book. There is no exaggeration in the tale, and no distortion. But in Fielding's case this perfect balance of mind is gained by the exclusion of the whole spiritual nature of man, and all his grander and more tragic passion ; while Shakespeare, whose mind embraces all the emotional possibilities of humanity, is equally just in his estimate of the comparative value of each. His calm arises from no ignorance of the bitterness of human life, and from no desire wilfully to ignore it, but from an equally clear knowledge of the sweet that counterbalances it. He abstains from enthusiasm, not because he is incapable of feeling it, but because he sees above and beyond its aims, and is able to assign to each of them its proper place. Yet this poet, who held all the realities of life with a firmer grasp than any other, almost alone of the dramatists of his age ventured into the old enchanted region ; and it is only through him that the average Englishman of to-day

knows anything of the dreamland of the Renaissance. For the stories of the romance writers, though unreal, had not been untrue: nay, they embodied important truths that could not be otherwise expressed. We are more than we seem, and each of our natures contains a possibility of good and evil that is not adequately mirrored in our actions. Our lives are, indeed, the records of our characters; but the pages are sadly blotted, and written in a crabbed style and hand. We would fain appeal from them, and believe, with Mr. Browning, that—

All the world's coarse thumb
And finger failed to plumb,
So passed in making up the main account ;
All instincts immature,
All purposes unsure,
That weighed not as his work, yet swelled the man's amount :
'Thoughts hardly to be packed
Into a narrow act,
Fancies that broke through language and escaped :
All I could never be,
All men ignored in me,
This I was worth to God, whose wheel the pitcher shaped.

And it must be remembered that it is our finest imaginings which are most apt to be thus lost, our highest ideals which it is most frequently impossible to realize. Happy is he who has not at times had reason to feel that his actions have been a caricature of his intentions, that the tragedy has become a farce in the playing. Hence, advantageous as it might be if the wish of Burns were fulfilled, and we could indeed see ourselves as others see us, truths of a far deeper significance might be learned if we could but see others as they see themselves, since even the noblest lives are only a grand conception imperfectly worked out in a base material.

This incongruity between our internal and our external life is a fact that was constantly present to the minds of the romance poets, and they consequently allowed their highest aspirations and their airiest fancies to mould to themselves fitting forms of the lighter substance of imagination. In this they were but doing what every youth who indulges in a day-dream still does. Only the selfish desire for a personal distinction or satisfaction, which is the foundation-stone of every castle in the air, becomes in their writings the aspiration of knighthood. Their poetry is the day-dream of an age's culture.

But of its culture only. It was for the refined alone, for knights and nobles, for courtiers and scholars, that "Tristan" and "Poor Henry," "Parzival" and "Orlando Furioso," the "Fairy Queen" and the "Arcadia," were written. As every class consists of human

beings, every ideal picture of it must contain some human truth ; and Ariosto, being the greatest poet, allows this element a greater weight than any of the others. It is chiefly for this reason that he alone among the writers whose names we have associated with his has attained a lasting popularity among the lower classes of his own fellow-countrymen. But by its nature a class is also sectarian, and its narrowness is apt to become still narrower in such an imaginative picture. Thus, when we turn from these poems to Grimm's " Fairy Tales," the romance world of the German peasantry, we are at once struck by the difference of their tone. The whole scale of virtues and vices is changed. The qualities which are intended to excite our highest admiration in the one are almost entirely absent from the other. Love and fighting are the chief subjects of the courtly poets ; how small a part they play in the popular stories ! The hero, it is true, frequently marries a princess, but her kingdom is evidently considered as important a gain as her person. And when love really is there, how different is its character ! Then, what are we to say of the utter absence of religion from the dream world of the peasantry, except where a few saintly names have slipped in, as if to show that it was no feeling of reverence that prompted its exclusion ? In the tales that Miss Gonzenbach has written down from the lips of Sicilian peasant women, and in some other Southern collections, it is true, both love and religion play a somewhat greater part ; but still, they are far from occupying the place which they do in chivalrous romance. It is no explanation of this to say that the popular stories owe their origin to an age long prior to Christianity, for that is probably also true of many incidents in the courtly poems, and in both cases they must have been so modified as to harmonize with the hearers' sentiments, or they could never have become or remained popular.

The class spirit that inspired so much of the romances has long been dead, and it requires some knowledge of the past, and a considerable exercise of the imagination, to realize the charm which many passages in them must have had for their earliest readers. Now they are a mere weariness to all but the historical student, and they are so frequent as to make the whole region that was once so fair seem little more than a sandy waste, with here and there an oasis where the fresh waters of human feeling flow and the frailest flowers of poetry can therefore bud and blossom. It is this sectarian sentiment that has condemned so many of these poems to forgetfulness. Our inability to sympathise with feelings and motives of the heroes, rather than a disbelief in their adventures, casts the

dim shadow of unreality over their stories. Mr. Tennyson's "Idylls of the King" have proved conclusively that the tales themselves have vitality enough, when a modern ethical sentiment is substituted for that of the Middle Ages.

Shakespeare's world-wide vision, and the just estimate of comparative values which was its most precious result, enabled him, in all his mature works, to seize on the simply human fact or emotion that is mirrored in every passing show of life, and his imaginative comedies therefore remain as fresh as they were on the first day of their representation. We are haunted by no scepticism when we read of Ariel or Caliban, and the words of Miranda and Ferdinand still seem as true and fresh as if they had been spoken under the trees of Hyde Park or on a seat in Kensington Gardens ; only, they are apt to remind us more frequently than modern novels do of our own youthful dreams. For, by being freed from the restrictions of other interests, and allowed freely to grow as its own nature directs, love itself gains a more universal significance, and a greater resemblance to each of the forms under which it appears. Yet, there is not one love, but many—that of Viola is different from Miranda's, though it is in its own way as true and free. For that message to Olivia—like Ferdinand's log-carrying—hard as it was to bear, only served to call out and to show the whole sweetness and purity of the passion. Indeed, in the "Tempest" Shakespeare approached almost the symbolism of Wolfram. Is not every pure maiden's girlhood passed in something very like that "uninhabited island"—surrounded as she is by eerie voices and wonders, and seeing no man's face but that of her father and an ugly monster. (In which little comedy her father's elderly friends have to play the part of Caliban, and do it, let us hope, with as little peevishness as may be.) Does not her lover still come to her, led and heralded by fairy music, from that mysterious outer world, a veritable spirit,

A thing divine, for nothing natural
She ever saw so noble?

And how ready she is now as then to become the stranger's surety, if Prospero should have or feign a doubt, trusting at once and entirely her own instinct rather than his experience, and the wisdom she has hitherto followed so blindly ! Or, to turn to the "Midsummer Night's Dream," which of us has not seen some Bottom pillowed on Titania's knees, and unable to find any occupation for her elves save that of scratching his ears ?

But it is not only because the emotions that are mirrored in these

comedies form such an essential part of human nature as can never become obsolete, that we are so ready to yield to their spell. Even when we feel most deeply the truth of the old romances, we feel also that it is only half a truth. Thank God, there are and will always be loyalty and devotion, love and aspiration, in the world ; and yet they form but a small part of our lives, and that, not only because we fail in carrying them perfectly into practice, but because other interests and emotions, as real and as important, are opposed to them. When, therefore, we enter an intellectual world where this is not the case, we feel that our moral centre of gravity has been changed ; nay, that though it may be grander and lovelier, it is also narrower and less varied than ours. But in Shakespeare's imaginative comedies this is not the case. The true proportions of life are preserved, though its dimensions are enlarged. Whenever he has dwelt on one set of facts and emotions, he hastens to insist with equal earnestness on the opposite. Thus, in his art an Ariel implies a Caliban, and the clowns the fairies. Between these extremes the other characters move, tending this way or that as their nature may direct ; but the just balance is always preserved ; and this is true, not only of those plays in which spirits of the lighter order appear, but of the others which resemble them in tone, such as "Twelfth Night" and "As You Like It."

We need not therefore regret the fairyland of our childhood. If we have outgrown its joys, we may find a brighter and more varied dream-world in the forest walks of Arden and the city in Illyria. The elfen breezes pass for ever through them, fragrant with the scent of unknown flowers, and musical with the echoes of distant minstrelsy. On the stormiest night the moon shines full and clear on the wood near Athens, and through the weariest day the enchanted island preserves its spells. Nor can we ever grow too old or too wise to seek refreshment and repose there.

CHARLES GRANT.

WILD HORSES AND KANGAROOS.

IN a previous article devoted to a description of life on a cattle station,¹ wild horses and kangaroos were introduced, with a half-promise that they should form the subject of a chapter to themselves. In redemption of that implied promise, I herewith invite the reader to return with me to the mountain country where the cattle roamed literally upon a thousand hills, and fattened upon rich blue grass.

Almost impossible as it seems that, in a vast grazing continent like Australia, the land can be overfed, it yet remains a fact that overstocking is one of the evils of pastoral pursuits in the colonies. Squatters are not different from other human beings in their haste to acquire riches, and they pay the usual penalty of often killing the goose that lays the golden eggs. The wily pastoralist crowds his run with more sheep or cattle than it can bear, the fine wild herbage disappears, the land becomes impoverished; and he sells his vested interests, and moves farther afield to repeat the process. Greater care is now being exercised in the preservation as well as acquisition of the natural grasses; squatters, learning wisdom by the misfortunes of others, are becoming convinced that the pastures require rest, and that wasteful consumption must be avoided. Amongst the wasteful consumers are to be included the few wild creatures peculiar to the country. The worst are the kangaroos, which exist everywhere. Upon the run of which I now write, the wild horses, the "brombies" of the previous article, were unfortunately prominent in the category of nuisances; and as they are the nobler animal, of them will I first speak.

For a while I could not bear the idea of shooting down the friend that one learns so soon and so truly to love. By comparison with such an act, the shooting of a fox seems to me an absolute virtue. But the wretched aboriginal has to be "improved off" the face of the earth to make room for the white man; and, as the wild horse eats an abundance of grass, and dispossesses the bullocks of their lawful food, is it not but fair and needful that he too must be removed? It is a clear necessity. Besides, horse-flesh is ridiculously cheap in Australia. I have seen a horse sold for thirty shillings. He

¹ See *Gentleman's Magazine*, January 1881.

was, doubtless, a sorry sample of unadorned framework, and was as aged as the fancy liked to make him ; but he was capable of some work, could be spurred into a canter, and might at a remote period be fed into something like condition. Not a month ago, I sold a very passable little hack, that would carry a lady, that had no vice whatever, and that would carry my eleven stone thirty miles easily, for five pounds ; and I did so to secure a serviceable buggy horse, good for side-saddle and general hack work, for ten pounds. It may be therefore surmised that, taking into consideration the quantity of grass he consumes, and the trouble of taming and getting to market, the cheapest use to which the "bromby" can be put is to shoot him. Yet, again I must say it, the idea is even now revolting ; and remembering the difficulty there is of obtaining good remounts for India—not very far off, in these days of rapid steaming—it is a pity indeed that these roaming herds cannot be more largely utilised for the service of man.

There are not many stations probably, out of this one district under review—large, however, as a European kingdom—where these animals are to be found in any quantity ; but the hunter whose acquaintance I made had, during the two years previous to my acquaintance with him, shot 3,000 horses. The station at the same time broke in as many as it required for its own purposes ; out of 170 upon the roll of disposable horses at the time of my visit, 84 had been captured wild, and converted into hardy, game, docile creatures, and many others had been sold in different parts of the country.

Our Horse-hunter was a fine rider, of course, and a famous shot with the rifle. Heart and soul he loved the sport of the affair, the pursuit, and the capture ; while he found his profit in the hides, for which he obtained six shillings each, and the hair, which fetched ninepence per pound. He would set forth on an expedition with pack horse laden with provisions and other camping-out necessities, and attended by a mounted black boy or two. Marking and guiding himself by the tracks along the ridges, he would by-and-by espy the distant mob, consisting of from six to twenty animals, and dismount, to approach from tree to tree until within range. In the mob there is always a master, and sometimes there will be a second stallion, strictly kept in a subordinate position. The patriarch in times of danger takes the lead in the mad gallop for liberty ; but until things become serious, he is invariably found in the rear.

The hunter prefers a range of two hundred yards ; can sometimes, when cover is good, sneak to within half that distance ; but as often as not has to do his best at three hundred yards. His weapon is a

short Snider rifle, handy to carry slung over his shoulders when mounted. Frequently, getting two horses in a line, he sends a bullet through both, and it is no uncommon thing for the second struck to fall at once, and for the first to gallop fifty yards before dropping. When sport is conducted under favourable conditions, he cautiously follows up the herd, riding by circuitous ways to the ridge where his judgment tells him the frightened animals have passed. On several occasions, when fortune has been very high, he has, in pursuing this policy, and by always keeping to leeward, been able to kill every member of the family. The attendant blackfellows skin the slain, and the hides are packed forthwith upon spare pack horses brought for the purpose. The Horse-hunter upon this particular station enjoys a kind of monopoly. He is not in the employment of the firm, but has the shooting on the understanding that he gives them ten per cent. of the horses captured alive; and they are only too glad to get the work done on these terms, because the "brombies," in addition to their grass-devouring powers, are credited with seriously disturbing the stock.

The running-in of herds for taming is, as might be expected, a most exciting occupation, and the pace at which the operation is effected would give the red-deer hunting men of Exmoor precisely the sensations they love. Considerable preparations are made beforehand. If possible, a bit of ground in a hollow, from which several spurs of range diverge, is selected for the trap-yard. From this a "lane" is formed about three hundred yards in length, of strips of calico stretched from tree to tree, or of saplings and boughs, arranged to convert the "yard" into a *cul-de-sac*. The beaters are dispersed in several directions by their chief, and draw a cordon around the herd to be driven. The patriarchal horse soon snuffs danger from afar, and, cantering lightly around his wives and children, starts them in the direction where the coast seems clear; the shouts and whips of the beaters, nevertheless, artfully and surely heading them towards the funnel-shaped passage. One man is sufficient to put them at their mettle; the other beaters take the spurs of the mountains on either side, to prevent deviation from the desired course. The "drive" generally means hard racing for ten or twelve miles, partly down stony ridges and precipitate gullies that no man would face unless his blood were up to fever heat and his horse well proven and sound in wind and limb. At the moment, on one of these occasions, I felt that I would have given worlds to have been able to follow such a chase. But I had spent too many years of my life in the roar of Temple Bar, and too keenly remembered the demands of family ties, to risk my neck in the glorious

pursuit, which, after all, could only be indulged in by thoroughly trained stock-riders. Wherefore, I wisely reined in, to the open disgust of my fretting mare, who, like myself, listened to the receding thunder of the flying hoofs and the crashing of the timber, echoing up and down, until the whole was magnified into sounds resembling the headlong career of a fugitive host.

The herd—so thorough are the precautions taken—seldom gain the liberty they so gallantly seek. Their very speed is their doom. The horse is too high in character to craftily double or sneakily run to earth. From the moment the patriarch swings to the head of his column, the line is straight and the headlong charge impetuous, let the obstacles be what they may. The dispositions of the beaters are too well chosen to admit of subsequent swerving, and before the herd are aware of the treachery intended they are charging down the last ridge, avoiding the white canvas on the trees, and on that account suddenly brought up in mad confusion, in the strongly stockaded *cul-de-sac*, across the mouth of which massive rails are quickly slipped by a man who has been lying in ambush for the purpose. The captured horses are at first frantic; they plunge and leap around their narrow bounds, horses, mares, colts, and fillies, squealing, biting, fighting, and kicking at the palings of massive logs nine feet high. The largest number ever run into the yard after this fashion was forty; but twelve is a fair average.

Having thus got the game in a trap, the question arises how to get them out. If they are very wild, they are left to their own reflections for a couple of days, to grow tame upon hunger. When the Horse-hunter deems it advisable to consummate his capture, he and his assistants lasso, throw, separate, and hobble the animal they select. It is surrounded by men who religiously keep at a non-kicking distance, and brought out—dragged out, if resistance is offered—into a group of quiet horses: decoys, colonially termed “coachers.” Mounted men are near, ready to fly the whip, and so, spite of struggle or anger, the helpless horse sooner or later makes a virtue of necessity, and succumbs, accompanying the coaches submissively to the head station yards. Sometimes a different plan is adopted. The selected bromby is fastened by a halter to a tame brother, and both are led away by a horseman. This operation must be performed with caution, for the plunging of the captive is apt to bring both horses to the dust, demanding of the horseman a quick eye, hand, and heel, and that most essential acquirement for a rider—the art of being thrown conveniently.

In a surprisingly short time these brombies are quite amenable

to discipline, and it is not a little singular that they are, as a rule, broken with less difficulty than an ordinary thoroughbred. When skilfully broken they make, as in another article in this magazine I have shown, most useful servants. One evening I saw a man ride up to the head station, exchange a few words with the overseer, unsaddle, and turn his horse loose. It was not a big animal, nor a comely, but it shook itself, enjoyed the luxury of a roll in the grass, and, after another prolonged shivery shake, walked lightly down, whisking its tail, to the waterhole. Yet that hardy, grass-fed bromby had carried its rider seventy-six miles within the twelve hours, and seemed fit to do the journey again. Of course, a horse is not allowed to repeat such labour immediately, but the endurance of these unshod brombies is astonishing.

The term "wild" is employed with horses as with cattle in the colonies; they are the progeny of once domesticated animals run wild. It is possible that the sire of this numerous race is still enjoying lordship and freedom in the mountains. About thirty years ago a sheep-owner in the district, there being no shearing to do, took it into his head to breed horses, and one of his entires of Arab breed got away, to gallop before long, perhaps, over the grave of his master, who was buried in the lonely ranges. The truant was a chestnut, and the majority of the brombies I saw—a hundred at least, wild and tame—were of that colour. The average height would be fifteen hands; and there were horses of all colours. The chestnut was a three-quarter Arab, and it should also be mentioned that he took a couple of thoroughbred colts with him. Others also must have escaped about the time of the stud-owner's death, for now and then an old bromby has been shot bearing the familiar brand of the stud. There are two or three veteran horses, supposed to be five-and-twenty years old, occasionally seen in distant ranges, but the majority shot are evidently of the third generation.

The brombies at first show a tendency to buck, though, when the training is not hurried, they are cured of that vice, which, in nine cases out of ten, is due to the stupidity of the trainer. The most rowdy horses on the station were certainly not brombies.

The running-in process is not carried on without losses. The drives are often fatal to the favourite horses ridden by the hunters; many brombies gallop till they drop, and others die of broken hearts soon after their capture. In their state of freedom they are always in racing condition, and it is scarcely an extravagance to say that they gallop like the wind. Although three thousand hides have been in so short a space accounted for by my friend the Horse-hunter, the

number of brombies now at large seems rather to increase than diminish : the only effect of the slaughter is to drive them into the inaccessible ranges and upon other runs. Sometimes the brombies, amorously inclined, wander within four or five miles of the head station. At dewy dawn one morning, riding out to an early drafting, I saw a magnificent brown stallion looking longingly over the fence of the breeding mares' paddock, and the men told me that a week before he had leaped over, and, being chased, had leaped back again like a bird on the wing.

The same inveterate ill luck which has always pursued me in sports and expeditions about which I am enthusiastic, followed me here. The Horse-hunter was good enough to put himself to vast trouble to give me the chance of shooting a wild horse ; borrowed a pretty little rifle from a squatter eighteen miles distant ; and had himself travelled over a hundred miles to accompany me. But I seemed to bring him ill luck too.

It was a superb morning on which we started. The first laughing jackass was making game apparently of the grey streaks in the east, as we strapped on our tin pannikins, put our cold beef, bread, tea, and ammunition into the saddle pouches, slung our rifles, and rode cheerily out of the home paddock. In five minutes we were in the forest, our horses' hoofs and legs wet with the dew they brushed at every step—all creation, as yet, silent. If at any time of the day the bush is awakened by melody, it is during the morning and evening hours, and on this occasion there was no lack of bird music, from the sweet fluting of the magpie to the discordant shriek of the gold-crested, high-crested cockatoos, bound for a foray amongst somebody's maize. The atmosphere was perfect as atmosphere upon this earth can be ; the surroundings, endless vistas of refreshing green, shot with bars of gold, and toned with shadows where the fast-gathering sunbeams had not touched.

Up the ridges, along the crests, down into the valleys we ambled for a couple of hours, conversing in undertones, and looking for recent bromby occupation. And it so happened that my eye discovered the first mob. We were by this time fairly in the mountains, and, rising to the crest of a ridge, I caught sight, in a verdant bottom five hundred yards off, of a fine chestnut stallion, three mares, and two foals. With a "hist" to the Horse-hunter, I reined in ; he did the same. We quietly dismounted, armed, tied up the horses, and crept stealthily onwards. The brombies, suspecting no harm, leisurely cropped the herbage. As we paused to reconnoitre, the sun struck athwart them and showed them to be a happy and handsome

family, coats as sleek, manes and tails as fine, and hides as well filled as if they were under the care of a stud groom, and movements free and graceful as only those of the untamed can be. Stalking from tree to tree, and finally crawling on all-fours, we arrived to within a couple of hundred yards. There we found our last chance of concealment, and sighted accordingly. The Horse-hunter, with true courtesy, motioned me to take first shot, and I lost the opportunity—the only good one I had that day—by reluctance proceeding from admiration of the victims. The finger was on the trigger, when one of the fillies began to graze her way to the sire, of whom she was a remarkable copy. The old fellow playfully nibbled at her, and the grand crest and outshaken tail revealed by the movement, together with the pretty coquetting of the little one to its dam, effectually caused the finger to relax, and the trigger to remain unprest.

The Horse-hunter, very properly, was not to be so fooled, and he fired. The foals cantered to the farther side of the mares, the mares stood at attention, the sire paused, fore-feet apart, erect, a model for an equestrian statue, looking surprised, and curiously turning to where the blue smoke curled amongst the trees. For a moment the happy family remained so motionless that they might have been photographed; and an incomparable photograph they would have made. All was changed with the crack of the second shot, which was not slow in coming. The little mob then took alarm, went away first at a trot, then at a swift, graceful hand gallop, and were lost amongst the timber of the opposite ridge. The Horse-hunter afterwards declared that his anxiety to show me what he could do spoiled his aim. Of his ability with the rifle I had convincing personal evidence, but he had been out of practice for a couple of months, and we next day discovered that the cartridges he now tried for the first time did not suit the rifle. Two days later, he came in with six-and-twenty horse hides from his own gun. For myself, I was not surprised; it was not the first time I had gone about oppressed with the conviction that I was the Jonah of an expedition. Nor was I, in truth, at heart sorry to see that comely group gallop away unhurt.

In the course of the day we sighted a dozen mobs. The first was the smallest: the largest contained seventeen animals, old and young. Time after time the kangaroos spoiled the sport by bounding from us at the nick of time towards the horses we had by patient labour stalked. The latter must have long ago been familiarised with these uncouth marsupials; but the hop, skip, jump, and thud of the high-flyers always alarmed them, and if they did not at once

decamp, they were kept enough on the alert to get the better of us. As the day advanced, we found that the horses had left the green glades, and were standing meditating in the ridges, generally upon an eminence from which they could receive prompt warning of an approaching intruder.

Our one success was the shooting of a small "nuggety" chestnut mare. She was one of twelve, amongst which there were two horses—the chief, a massive upstanding bay fit for any warrior's charger; and the other, a compact, showy roan. The Horse-hunter's bullet, at long range, entered between the ribs, as she was moving at a walk nearer to her fellows. She gave a snort of pain, reared, and began to plunge. The bay and the roan, fright and anxiety visible in every action, trotted up, pawing, and sniffing the blood-dappled grass. Another shot was quickly fired at the roan, which was hit, as it seemed, in the shoulder, but not badly; and then the lot galloped at full speed out of range. The poor little mare lagged, however, behind in sore distress, and the rest, soon slackening speed, wheeled with tails streaming out and heads boldly up, and trotted back to their wounded companion. If ever dumb creatures expressed painful sympathy and hopeless bewilderment, that did they. They tried to urge on the mare, the big bay especially giving her an encouraging lead, and, finding no response, always returning and circling round her. It was with a feeling of relief that by-and-by, making a long détour to come down at the head of the mob, I espied the death-stricken mare standing trembling under a tree. The remainder had winded us as we descended the ravine, and made into the hills, where half-a-mile distant we could hear them neigh, and see them pause in close company, facing the spot where the chestnut trembled on. Before we could carry out our merciful intention of putting her out of her misery, the bullet finished its work. She sunk to her knees, and rolled over dead. She appeared, when first I saw her under the hunter's aim, glossy, plump, and bright with strength; during the twenty minutes which intervened between then and the final halt under the iron bark she had apparently been transformed into another creature. Her coat had become rough, her tail and mane were drooping; the arch was gone from the neck, the limbs were feeble, and her very flesh had shrunk. She presented the difference between a favourite one would love to fondle and cherish, and a miserable weed fit only for the knacker's shambles.

The Horse-hunter was much mortified at missing the roan, which he had known for four years past as a mischievous rogue that had once performed the wonderful feat of scrambling and leaping over

the trap-yard fence, and had three times been the means of turning aside mobs that were thundering straight for the *cul-de-sac*. The big bay was also a notorious individual—a daring and artful freebooter, parading jauntily along the paddock fences to-day, giving the alarm here, there, and everywhere to-morrow, and at all times an impertinent meddler with legitimate sport. My guide was quite depressed at the results of his shooting, and, before we remounted, gave a striking proof of his skill as a marksman. A couple of kangaroos had been watching us, at a distance of two hundred and fifty measured paces. He aimed at one (the “old man”), which, probably by accident, though it seemed by design, simultaneously dropped to its forefeet. The sportsman whistled and shouted, “Now, then: get up, old boy!” and—this must have been a mere coincidence too—the kangaroo on the instant stood erect on its hind legs, and received the bullet clean in the centre of the chest, tumbling over very much dead. Still, the shooter refused to be comforted. “Only to think,” he said, as we jogged up the next ridge, “that I once shot twenty-seven without moving from a tree on this very ridge”—an exploit which I subsequently heard verified by an eye-witness. He had managed this by putting a common device of his own into practice; had begun by crippling a mare, with the express purpose of keeping the horses around her.

My Horse-hunter, I found, enjoyed a high reputation in the country around for skill in catching and shooting wild horses and scalping kangaroos. He was the Nimrod of the district, gave his mind to the calling, and made it pay. The bromby nature he had closely studied, and knew its manners and customs. Of this I witnessed a curious incident. We had with difficulty stalked a mob of brombies, only to be annoyed by seeing that they were too far in an open glade for the rifle. Pausing at the last bit of cover, he whistled an imitation of a horse's neigh so much like the original, that, looking another way at the time, I fancied it was one of our own animals. The brombies were, for the moment, deceived also; the mob stood still, gazing wonderingly right and left, and the leader moved in a dignified manner a few steps towards us. Something then opened his eyes to the deception, for, without any apparent cause, he suddenly swerved round and took away his companions in furious stampede. I learned from the Horse-hunter that when the patriarch of a mob is shot down the second stallion, if there is a second amongst them, screams, rushes at his once successful but now prostrate rival, and worries him, dog-like, with his teeth, as if the sudden remembrance of animosities and humiliations prompted him to add to the death-agonies of the chieftain whose will, during life,

he dared not oppose. The hunter naturally takes advantage of this unseemly exhibition of rage, and lays the rivals side by side.

The kangaroos in the district had been, and indeed are, very troublesome, and my companion in the hunt after brolbies had made a good deal of money by scalp-hunting. After the passing of the Marsupials Destruction Act,¹ a number of young fellows bought horses and equipments, and in this part of the country devoted themselves to shooting the universal pest. At first the local boards, acting under the statute, fixed the rate of pay at 8*d.* per scalp, and the price was remunerative to a good sportsman. During the month previous to my visit, one of the partners who was the receiver for the locality accepted 3,500 scalps, which, being counted and entered to the credit of the scalpers, were burnt according to custom. The time had, however, arrived when the necessity for destroying the kangaroo was not so great. The drought had driven them in during the previous years, but as the grass and water became abundant they had retired and spread over the country. The rate was thereupon reduced to 6*d.* per scalp, and this leaving little profit over expenses, most of the hunters had packed their baggage and left the district, as far as they cared, to its fate..

The head stockman on the station, one of the prettiest riders after stock I have seen, was however allowed the privilege of spending his spare time in scalp-hunting, and in six months he handed in scalps which were paid for to the extent of £140. Living as he did on the spot, the entire cost to him could not have been more than £40. The rest was good pocket-money for a man of his class. The sport should go for something, moreover. There are no elements of danger or hairbreadth escapes, as with that romantic American

¹ This Act has been in operation three years, but for the first eighteen months the people of the district took no interest in it. Many things are done with a rush in the Colonies, and when it was found that scalp-hunting would pay, something in the nature of a rush took place. Though at first 8*d.* was offered for Kangaroo and 3*d.* for the smaller Marsupials, the rate dropped as I have described, and since the above was written I find that the Act is becoming a dead letter. The English reader will realise what pests the Marsupials are when I state that during the year and a half when scalping was brisk, 35,890 scalps were paid for by the official receiver, and of these 30,000 came from the run to which this and a previous article apply. The money was raised by assessments fixed by a local board—so much for sheep and so much for cattle. Twenty head of cattle were equal in assessment to 100 sheep. It is generally held that a kangaroo eats as much grass as a sheep, and destroys as much as it eats, through the knowing manner in which it picks out the best herbage. In Queensland alone a million of skins must have been wasted. The head stockman used to skin the "old men," and never had any difficulty in selling them at 2*s.* per dozen.

scalp-hunting the accounts of which used to take away our boyish breath. You require a quiet horse used to the gun, and a piece that will hit hard and shoot straight ; and you must never forget to approach your game against the wind. Kangaroos have a knowing scent, and you had better remain at home if you neglect this precaution. Better the creatures saw than smelt you. In the one case they would probably stand and gaze inquiringly, until, all too late, they would have an end put to their inquiring for evermore ; in the other, they would be up and away, *not* leaving their tails behind them.

Deliberation, too, in every movement is necessary in dismounting ; in allowing the horse to stroll slowly forward, you keeping discreetly by the saddle flap ; and in giving him at the proper moment a poke in the ribs to accelerate his walk, leaving you a clear shot. If possible, you should manœuvre to get two or three kangaroos in a line, for the AAA cartridges sent home will despatch a couple as effectually as one. The Horse-hunter in one day killed, or effectually crippled, three at one shot in the morning, and five at one shot in the evening, and a very indifferent marksman on another occasion, by a miraculous stroke of luck, bagged 12 adult kangaroos with two barrels, besides three or four babies that hopped out of the dead mother's pouch, and were despatched with a stick. The best thing in scalp-hunting done by the Horse-hunter was last winter : he went out at daylight, and returned an hour after dark with 70 empty cartridges and 75 scalps depending from his saddle-bow. This was altogether unprecedented luck, however, but he often handed in as many as 60 to the official receiver, as the produce of a day's shooting. It must not be overlooked that there is work as well as pleasure in this sport, which means continual mounting, loading, and cutting off the ears together with the strip of skin connecting them. Fifty yards is a sensible range for kangaroo shooting, but on moonlight nights the scalp-hunters can lessen that distance by one-fifth. My own experience has been that a bounding kangaroo is a better mark than a stationary one. If it is a side shot, you should aim two feet ahead ; if the animal is leaping towards you, by firing low you will break its legs, even if the breast be missed.

REDSPINNER.

THE ENTREMESSES OF CERVANTES.

IN the "Grand Sultana" one of the minor characters—while declaring that the thanks of the public are due to a certain "Alonso Martinez, upon whom God be merciful," for his substitution in comedies of dances which alike entertain and delight, for Entremeses—speaks of the latter in no complimentary terms, as "hungry, thievish, and becudgelled." These terms, however, are intended rather to defame the subject of the pieces than to bring the pieces themselves into disgrace. For their matter was almost always taken from what are known as the lower classes, and highly respectable people rarely appear in them. As Lope said, in his "Art of making New Comedies," *entremés de Rey jamás se ha visto*. Such a sight would be as uncanny as the appearance of a prince or archbishop in a farce of the present day. Entremeses were so called first by Timoneda, and succeeded the old *pasos* or passages taken from some favourite author. They were interludes, short pieces playing about twenty minutes at the longest, which have now long fallen out of fashion. They used formerly to be introduced between the acts of a comedy, or between the Loa and the Auto in a religious play. In this respect they resembled the chorus, which filled up the intervals of a Greek tragedy. They were by no means confined to Spain, but were frequent also in France, Germany, and Italy. Tumbling and rope-dancing appear to have been their representatives in our own country. The *sainete*, or farce, is now their nearest equivalent. They were always more or less comic in character, and were written in a simple popular style, to relieve the audience from the mental exhaustion into which they were supposed to be cast by following the various vicissitudes of the characters in the principal comedy. As, however, they bore no relation to the main piece, it might have been imagined *à priori* that they would rather confuse than assist the spectators in their attempts to understand or remember the involved and intricate relations which almost invariably attend the development of a Spanish plot. But, says a Spanish critic, *entremeses* are of the greatest service to a comedy, whether it be

good or bad—for, if it be good, they act as wings, enabling it to soar still higher, and, if it be bad, they act as crutches, which at least will prevent it from falling to the ground. In a word, they make the good better, and the bad they make not to appear so.

The Entremeses of Cervantes are by many preferred to his Comedies. They are not, it is the general and perhaps correct opinion, to be surpassed by any of those of his successors. They are certainly free from that tediousness which is a contraband article in the custom-house of popular opinion. Nor is the wit of Cervantes cramped in them by the fetters of rhyme. Though poetry of some kind is to be met with in every one of the nine which he wrote, yet two only, by no means the best, are written entirely in metre. These are "The Election of the Alcaldes of Daganzo," and "The Bully Widower," composed chiefly in hendecasyllabics, of a far less sublime sort, however, than those with which the reader of his comedies is too well acquainted. For the matter, though thieves and cudgellings enter frequently enough into the interludes of Cervantes, they are not permitted to constitute the sole or chief interest. They are merely adminicular dues paid to the custom of his time. But in every one of them may be found some instructive moral. "The Bully Widower," for example, which is a counterpart of the "Matron of Ephesus," will show that inconstancy is not exclusively a feminine attribute. The "Judge of Divorce" will show some of the inconveniences of matrimony, and the wisdom of Æsop's old frog, who refused, though thirsty, to hop down into the well, because he could not clearly see his way out again. The "Jealous Old Man" introduces us to a Partholo, the dupe of a married Rosine, and the "Election of the Alcaldes" is a just and excellent satire on the Dogberries and Bridgsons, petty magistrates who make themselves ridiculous when they are incapable of showing themselves unjust.

The "Spectacle of Marvels" is shown by a puppet-player, his wife, and a small musician. Arriving at a country village, they present themselves before the Governor, the Alcalde, the Alderman, and the Clerk. Two of these officials have, as frequently in Spanish farces, comic names. The Alcalde is called "Blessed Cabbage Head," and the Clerk "Night Crow," names which fit their respective conditions as well as Fidele's suited with her faith, and Pistol's with his fierceness. The puppet-player advises his wife to put an edge to her tongue on the stone of flattery, and she compliments the Governor, who is the author of a poem, "The Deluge of Seville." They obtain leave to present their show that night at the nuptials of the Alderman's daughter. The puppet-player prologises to the effect

that the "Spectacle of Marvels" was composed by the wise Tontonelo, which is, being interpreted, "dolt," who wore his beard to his waist, under such-and-such parallels, rhombs, stars, and constellations; and that it is remarkable in being invisible to all who have any taint in their blood of illegitimacy or Jewish proselytism—common infirmities, as he calls them, of the day. The Alcalde, who has four fingers of fat of a rank old Christian on the four sides of his pedigree, is quite confident that for him, at all events, no iota of the entertainment will be invisible, or even indistinct. Equally confident is his daughter, who wishes she was as sure of going to heaven as of seeing the show. Equally confident are all the other officials. Not one of them has been "born among the mallows"—a Spanish phrase for a low extraction. The show commences. "Here," says the showman, pointing to a blank sheet, "we see the most valiant Samson a-pulling down the pillars, and here we behold Herodias a-dancing the zara-band and the chacona." Upon the latter of these performances, the Alcalde—who, like Mrs. Malaprop, always desires to say what is best, but seldom succeeds in doing it—makes a remark ludicrously out of season. From time to time this same dignitary waxes wroth with the small musician, and once threatens to throw a bench at him solely for his smallness. Other sights succeed, mostly of a savage sort. There is a dreadful dark-brown bull, with horns like an awl. There are a couple of dozen of ravening lions and honey-devouring bears, imaginary animals with the might of Hercules, and each brandishing an apocryphal sword. Lastly, there is a flock of rats directly descended from those in Noah's ark, blue, black, and marbled; one of which the bride, not content with seeing, declares has bitten her knee, and implores help from heaven, since there is none on earth. The *dénouement* is the entrance of a quartermaster, with commands to the Governor to billet certain soldiers. As the new-comer is unable to see anything whatever of the marvels on the sheet, he is exploded with hisses, like Satan on his return from Paradise. Not approving of this, he beats the officials, and a general becudgelling ensues, in which the Alcalde does not forget his grudge against the diminutive musician. This entremes perhaps suggested to Piron his comic opera of the "Faux-Prodige," or the "Robe of Dissension." Here a servant prevents the marriage of his master's sweetheart to another man, by exhibiting to him the old black gown of an alguacil. The magic robe he declares to be of a beautiful flame colour, and enriched with marvellous embroidery, but both its broidery and its redness can be seen only by him of whose affianced the conduct is without reproach. It was this very robe



and tears and fainting fits. Her words are tender and affectionate as those of the women in Terence. As soon as he has gone out, a sacristan and a barber, the respective adulterers of mistress and maid, come in. A student of Salamanca also forms one of the party. A buck-basket has been previously sent by a pimp of a washerwoman, full of chickens, pasties, fruit, and wine for the evening entertainment. In the midst of their amusement, while the maudlin minister is dancing to the sound of a guitar with his sacred petticoats tucked about his middle, a knocking, ominous as that in Macbeth, is heard at the door. The husband has returned. The student is packed into the straw house, and the barber and sacristan occupy conjointly the coal-hole, which was apparently at that period a space situated in the cock-loft. To afford time for this, the faithful and most cautious wife is meanwhile making all sorts of inquiries of her husband at the door. "Who are you? What was I doing when you went away? What mark is there on one of my shoulders? What is the name of our maid-servant?" The husband, being allowed at last to enter, is congratulating his wife on her extreme precaution, when an unlucky moan is heard from the student, who is half suffocated by a heap of straw which has fallen on him. The wife hastens to explain that she has given him lodging there for charity's sake, and the student plays into her hands with a stratagem from which the piece derives its name. He has, he says, learned the magic art in the cave of Salamanca, a mysterious place which also enters into the comedies of Alarcon. If the husband cares to see a specimen of his powers, he will instantly produce two devils in the shape of a barber and a sacristan with a basket full of dainties. A piece of needless profanity, in which Cervantes seems to have delighted, is here put into the mouth of the maid-servant, who inquires whether the devils are baptised. The devils sup with the party, the barber bearing witness that even the inhabitants of hell are tormented by hunger. The reader of Dante will recall the observations of Statius about the appetite of those in purgatory. The farce concludes after the approved fashion with *octavas de arte mayor*. To show how often Cervantes stole from himself, as Settle accused Dryden of doing, a sentiment of the irreverent maid-servant must be quoted: "My barber knows for my purpose as much Latin as Antonio de Nebrija, and more." This, the reader may remember, has been expressed in other words both in the comedy of the "House of Jealousy" and in "Don Quixote."

Perhaps the least entertaining of the entremeses is the "Judge of Divorce." In this piece there is no kind of plot. It is a mere

satirical dialogue in which nothing is concluded. Four couples—an old man, a soldier, a surgeon, and a porter, with their respective wives—seek for divorce *à mensâ et thoro*. The women's complaint is in every case the same. One of them calls her husband a bag of bones, another calls hers a stick, a third is of opinion that in well-regulated states marriages, like leases, should determine or be renewable every three years. The husbands on their side declare that if, as the law supposes, the wife lives under the power of the husband, the husband assuredly dies under the power of the wife. "Why, then," they ask, "should not a divorce be granted, if we are unwilling to die with them, and they are unwilling to live with us?" "If that were sufficient reason," replies the judge, "an infinite number of people, *infinitisimos*, would be for shaking the yoke of matrimony off their shoulders." Finally, these watches that will not keep time are to be regulated on some other day; and a dance with a song, of which the burden is that the worst agreement is better than the best divorce, concludes the scene.

The "Jealous Old Man" is cut out of the same cloth with the novel of the "Jealous Estremadoran." Even the names of the respective protagonists, Cañizares and Carrizales, closely resemble each other. The effect of evil which the first luscious pages of this tale were likely to produce is considerably lessened by the bitterness of its conclusion. But the extremes possesses no redeeming corrective quality. From beginning to end it is wholly immoral. As two out of Cervantes' interludes turn upon successful adultery, we may well suppose this subject suited to the taste of his audience. The same taste prevailed in England, as the reader of the *Spectator* is well aware, in the barbarous time of Addison. The Christian public of his day found in the violation of the marriage vow an inexhaustible well of mirth. It is difficult to determine how many grave and reverend gentlemen suffered this injury in plays of the Georgian era. No country squire came up to town, according to Addison, for any other purpose. The jealous old man is seventy years of age, and his wife fifteen. He has married her, he says, for her innocent society only; he is not destitute of understanding, or desirous of seeing the other world as soon as possible, but he would fain pass with her the vespers of his life. He has none other friend but her, whose soft hands he hopes may arrange his pillow and close his eyes in death. Their ages are indeed widely divergent; but if he has none of the fire, he has also none of the inconstancy, of youth. He is indulgent and charitable. His wife has trinkets in abundance, and she is confused by the many different colours of her robes. She is better dressed than a palm-bud,

and the window of a rich silversmith holds not rarer jewels than she. What more could the mind of woman desire? The old man dreams of happiness. True, he loves his wife; true, he is jealous of her, jealous of the sun which shines upon her, jealous of the gown which falls upon her, jealous of the air which touches her. He adopts sundry precautions for her welfare, and she calls him a savage barbarian. He tries to contribute to her security by the exclusion and condemnation of gossips of her own sex, and she inveighs against him as a wolf's mouth, a scorpion's tongue, and a den of malice. Alas! all his solicitude is to little purpose. A female neighbour—he hates the word female neighbour—a lady on whom Cervantes has bestowed the not incongruous name of Nettle, an evil female friend, who hides more wickedness than the cloak of night—in one word, a *Celestina*—brings to him one day some stamped leather tapestry on which are painted the paladins of Charlemagne. She is compelled to sell this work of art at a sacrifice, to release her son from prison. So she says, but her mouth is full of lies. The good old gentleman gives her a doubloon, but will not deprive her of the tapestry. She unrolls it, however, to show him the beauty of the figures, and while, with what little sight remains to him, he is admiring it, a gallant enters behind it into his wife's room. The adulterer's escape is facilitated by throwing a basin of water into eyes already too nearly blind. We may imagine the shouts of laughter with which the elegant taste of a virtuous public received this incident. Nor is the advancement of morality and the reformation of the age, the drama's true business, solely dependent in this *entremes* on such incidents as these. There is a little tiny girl, so young as scarcely to be able to dress herself, but yet an accomplished liar. She is the niece of the unhappy protagonist, of whom she speaks as a wicked old sorcerer, and advises his being drowned in the well and afterwards buried in the stable. Not altogether without reason is it said of her in the play that Satan speaks in her mouth. This same wren of nine asks Mistress Nettle, the female neighbour—to give her no worse a name—to bring her also a little friar for her own diversion. The piece concludes with a disturbance of the neighbourhood by the innocent wife, who, on being accused by her husband, is naturally loud in recrimination, followed by the entrance of a policeman and the inevitable musicians. The whole interlude is little more than a justification—nay, canonization—of domestic depravity and dishonour.

The “*Feigned Biscayan*” deals with the same section of society as the novel of the “*Feigned Aunt*.” There is an excellent moral

in it, though drawn, like the tribute-money of Vespasian, from an unsavoury commodity. It shows the biter bit, and may have been written in the idle hope of restraining the greed of that folk, in no time or place few, who pride themselves on reaping a rich harvest, however dishonourably, from the folly and weakness of those of whom they profess themselves the friends. A gentleman who is anxious—more, indeed, for his amusement than for any moral purpose—to put a trick upon a *muger errada*, or cocotte of Seville, introduces to her a friend of his who pretends to be a Biscayan, mimicking the bad Spanish of that country, whereof we have a sample set in the mouth of one of Don Quixote's earliest antagonists. He is described by his friend as a buffalo, with a face like that of one swallowing a pill, a little of an ass, something of a fool, and a bit of a drunkard. This fellow bears a strong resemblance to the confederate, in our newspapers of the present day, just come up from the country to enjoy himself in town, with a handful of counterfeit sovereigns, which he—good, simple man!—shows as part of the inheritance left him by an old aunt. Him the cocotte incontinently determines to skin like a cat. She lends him ten crowns on a chain worth one hundred and fifty. This chain is false, but a facsimile of it in gold has been previously tested by a jeweller at the Biscayan's request. The cocotte inquires about the false chain of the jeweller, who, supposing it the same with that he had seen, declares it, without further examination, to be genuine twenty-two carat gold. Soon after the Biscayan, under the pretext of having received a summons to attend his father's death-bed, asks for the chain, offering the ten crowns which had been lent to him, with some interest. The lady produces the chain, which he at once declares to be false, and not that he had left with her. The lady's asseverations and oaths are to little purpose, and she is only saved from being carried before the justice, from whom she can of course, owing to her profession, only expect injustice, by a forfeit of her ten crowns, a gift of six more to the policeman, and a supper to all the actors in the piece. Cervantes has generally observed the unity of action in his *entremeses*, but in this it is broken by an episode which, though it has no connection with the main story, gives some idea of the time in which it was written. A *pragmatica* or royal edict was published in January 1611 by Philip III. against the use of coaches, which had been brought over from Flanders by the Princess Marguerite, wife of Don Juan. A lady friend of the leading lady of the interlude speaks of this interdiction with no little dismay. It is true she allows that riding on horseback has fallen into disuse, since a dozen young gallants packed

themselves up in a coach like pieces of meat in a pasty, and that when the land-galleys fail them they will again take to riding like their honourable ancestors. But it is very hard that women like herself should not be allowed to ride seated in the poop of a carriage, filling it from side to side, and staring at everybody, how and when and where they will. She is only consoled by her friend's reply, that she will be still able to walk the streets in her mantle of Sevillian crape, and her new clogs with their silver lines, walking and mincing as she goes, like the daughters of Zion in Isaiah's prophecy ; nor, she is assured, will flies be wanting to such excellent honey. The musicians come in at the end, like the clown at a Christmas pantomime, with no better excuse than this : " We have heard everything, and here we are." The burden of the concluding ballad is that the best-advised woman knows little or nothing.

Hardly more complimentary are the lines which end the interlude of the " Careful Guardian," informing us that women always choose what is worth the least. In this graphic and witty sketch a kitchen scullion, the very cleanest in the scullion's calendar, is wooed by a soldier and a sub-sacristan, a shabby sub-sacristan and a knavish soldier with ragged robes and scarf and spy-glass. The ecclesiastic has given her a large quince-jam box crammed with the parings of the sacred wafers, white as very snow, besides half a dozen wax candle-ends, also white as ermine. The military suitor has nothing to offer her save tears and sighs and sobs. It is needless, perhaps, to add that the kitchen vestal, with the strong common sense of her sex, prefers, under these circumstances, the gown to the sword. But the soldier will not quit her door. Like the gardener's dog, as the Spaniards say, he cannot eat the cabbage himself, but he will take care that nobody else eats it. He turns in succession out of the street in which the star of his perdition shines, a boy begging charity for the oil lamp of Santa Lucia's image, a vendor of cambric lace and ribbons, of whom the scullion would fain purchase some edgings for shirts, and a cobbler who brings her some pattens, of which the gallant soldier is fain to take charge, offering the cobbler an old tooth-pick as a security. Thus does he prevent the gnats entering the cellar wherein is the sweet liquor of his content. Finally, to avoid a fight between her two *inamorati*, the maid-servant determines, after the exact fashionable amount of modest maidenly hesitation, in favour of the sub-sacristan, who has previously presented her with a sort of schedule declaratory of his love, and dated the 6th of May 1611—the day, perhaps, on which the interlude was written—witnessed by his heart, his understanding, his memory, and his will. The unity of

place in the piece is necessarily preserved by the soldier's resolve not to quit his station before his mistress's house, reminding the reader in this respect of a play once offered to Rich, the manager of Covent Garden, in which any violation of the same unity was effectually precluded by the protagonist being tied to the leg of the table during the whole entertainment.

The action of the interlude of the "Election of the Alcalde" or Mayor of Daganzo passes in a consistory assembled and met together in the town-hall of that country village. Here, before the local magnates, four candidates for the yearly office declare solemnly their respective qualifications. The names of these and their examiners may be quoted as samples of the custom in Spain as in England of that time, of coining, with little or no change, proper out of common names. The former are Ham, Crag, Frog, and Vapours; the latter Sneeze, Carob, Pandore, and Hoof. The candidates for the "vare," as Dryden calls it in his description of Sir Slingsby Bethel, are all country bumpkins, and, with the exception of Mr. Frog, of little understanding. In the same condition are, with the exception of their foreman, Mr. Hoof, the bachelor, the examining committee, to one of which body we are indebted for the information that heaven can do what it pleases without any one being able to oppose it, especially when it rains. During the examination Mr. Vapours, a man who can mend a shoe like a tailor, confesses that he is unable to read, nor, as he boasts, can it be proved that any one of the stock of the Vapours had ever so little judgment as to set himself to learn chimeras of this kind, which carry men to the stake and women to the House of Correction. He knows, however, matters of far more exceeding profit, as, for example, all the four prayers (whatever those may be), which he gets through, as he tells us, half a dozen times every week. Mr. Ham knows his letters, and has been engaged for three months in learning the alphabet, which indeed he hopes thoroughly to master in about five more. He professes himself an excellent ploughman, and no poor blacksmith. He can shoot with a cross-bow like Cicero, and were it not that he aims a trifle too much towards the left, not a single bird would sing in the neighbourhood. To all this he adds the negative qualifications of being neither deaf nor blind. Such exceptional recommendations for the office of mayor are, of course, extremely desirable, but the council are unwilling to make their election till they have heard the virtues of the remaining candidates. Mr. Crag, in his own opinion, can lend laws to Lycurgus, and can afford to treat the famous Bartulus in a way that calls down upon him the animadversion of the chapter.

Moreover, he has over five dozen wine flavours stamped upon his palate, and on one occasion, when asked to test a jar of wine, declared it tasted of wood, leather, and iron. When the jar was exhausted, a small piece of wood with a leather thong and key attached was found at the bottom. This marvellous instance of keenness of judgment is recorded also in the second part of "Don Quixote." The reader will remember how Sancho, on tasting some wine of Ciudad Real, was moved to declare to Tomé Cecial, the knight of the bachelor, Sanson Carrasco, his great and natural instinct as a taster of wines, how by smell alone he could tell their country, lineage, flavour, age, with all other matters appurtenant to them; and no wonder, indeed, for had he not on his father's side two of the most excellent judges of wine in all La Mancha? On a day they were asked their opinion of a certain butt. One tasted the butt, the other merely smelt it. One said it tasted of iron, the other that it smelt of leather. The owner said the cask was clean, the liquor unadulterated. Time went by, the wine was sold and consumed, when lo! on washing out the butt, a small key was found hanging by a leather thong. Though, in a more civilised country and in a later time, such a qualification as this would have at once made a magistrate of Mr. Crag, it was, in the barbarous period in which Cervantes wrote, considered insufficient. The last candidate, Mr. Frog, appears—a man with such a remarkable memory that he could repeat the whole of the famous ancient ballad of "Alva's Dog" without missing a word. This was a fellow absurdly unfitted for magisterial functions. He was for having the usual thin vare of office changed into a stout sapling of holm-oak, two fingers in breadth at the least, so as not to bend with the weight of a purse of ducats, or other heavy bribes. He was for making magistrates civil and courteous, and not allowing them to dishonour with harsh words the unfortunate man brought before them by his crimes. He thought the magistrate's insolence sometimes more painful than the cruelty of his sentence. Power, he said, should not destroy politeness, nor should the prostration of the prisoner give birth to pride and arrogance in his judge. Such another madman was this Mr. Frog as Don Quixote, when he gave his advice to Sancho about to exercise authority in the island of Barataria. "Do not, my son, ill-treat with words him whom it is thy duty to chastise with deeds. For the unfortunate, the pain of punishment is sufficient without the addition of insult. Consider the accused set before thy foot-stool as an unhappy man, subject to the depraved conditions of our common nature, and as far as may be, without injury to his adversary, show thyself to

him long-suffering and compassionate. All the attributes, indeed, of God are equal, but His attribute of mercy, in such eyes as ours, is more excellent and illustrious than His attribute of justice."

Mr. Hoof, the president, is about to give his vote in favour of this last candidate, when there is an irruption of gipsies and marvellous gipsy-girls, which prorogues the business of the election till the morrow. The gipsies proceed to the concluding dance and song, but are interrupted by the entrance of a sub-sacristan, who takes upon himself to find fault with their unseemly procrastination of judicial procedure. Mr. Frog is indignant. "What devil," he cries, "has donned your tongue? Who brings you here to interfere with the course of justice? Are you going to govern the State? Busy yourself about your church bells and your own affairs, and don't be for advising our rulers, who know better than we what they ought to do. If they are bad, pray to God for their improvement; if good, beseech Him that we may never lose them." Well may one of the judges say that Mr. Frog sings better than a dying swan. Without longer delay a blanket is provided, and the wretched ecclesiastical meddler, though he threatens excommunication to every one who touches a hair of it, is lightly tossed up to the stars. He leaves the chapter in sadness, but with increased sagacity, determining to sew up his mouth with a couple of cobbler's ends for the future. Here is a verse translated, which may serve as a sample of the songs which conclude the entremeses. It is sung by one of the marvellous gipsy-girls while dancing: "As the winds change, and as the boughs change also, which, naked in winter, are clothed in summer time; so we too will change our dances every moment, for in women changing there is nothing new nor strange." The song is written in the usual octave measure, the rest of the piece being in easy hendecasyllabics. The subject is little likely to lose interest for us, so long as our petty parochial meetings, say for the choice of a churchwarden, are distinguished by their present generosity, courtesy, and intelligence.

The puns and verbal errors, which constitute much of the humour of all the interludes, are in this exceptionally frequent. Mr. Carob is a near relation of some of Shakespeare's clowns, in defying the matter for 'To icksy word, and a direct ancestor of Mrs. Malaprop in his parts of nor blu. As for the puns, they are more permissible in a farce than in of Hamlet who complains of being too much i' the sun, or of mayor are, he declares his impious daughter damned for quitting willing to mak the remaining cal. rse interlude, called the "Bully Widower," the laws to Lycurgus, and is one Trampágos, a name conveying an way that calls down up

odour of collusion. He is introduced loudly and bitterly lamenting the death of Periconá, his partner, and that of all his bully band. Her age was thirty-two years for her friends and neighbours, but, as a matter of fact, she was fifty-six. She was, however, able, with a woman's address, to convert curls of silver into curls of gold. The issues in her arms and legs made her a very Aranjuez ; she had five true teeth and a dozen false ones, but withal was green as a jujube tree, and healthy as a wild pear. Tamarisk-water would have kept her alive, if she had only followed her physician's advice and drunk it regularly for seventy years. To Trampágos, owing to her power of beguiling the public of pence, she was a well of gold, a mine of Potosí. But she has left him, alas ! for ever, and gone—and this is the worst of it—he cannot imagine where. He is unable definitely to declare her *venue* in that other life. In his sorrow he appears on the stage in deep mourning. Cervantes seems to have intended a satire on this very proper and sensible token of respect for the dead, which at once enriches the honest haberdasher, and goes far to console the lamenting widow with the conviction that her chance of getting another husband is in no degree lessened by her wearing another gown made in the latest fashion. “What !” says this ruffian Trampágos, with a sense of the manners of good society, and some siftings of erudite allusion, which the reader unaccustomed to the Spanish rogue, as he is reflected in Spanish novels and plays, will much admire—“what ! am I a cayman, a carib, a cannibal, a barbarous Zoilus, a troglodyte, an anthropophagite, or a Polypheme, that I should attire myself in any other manner in a time of such misfortune ?” Therefore is this sun of rascality covered with a shadow and cloud of baize ; he has turned his two lamps into limbecks, and weeps more than half a dozen washer-women. Only a fencing-bout can lessen his pain, and he is about to apply this anodyne to himself with the assistance of one of his huffers or roughs, when he is interrupted by the entrance of three ladies. These are the Misses Stray, Spruce, and Waterwagtail. Encouraged by their arguments, he seeks among them a successor to the peerless Periconá. Some slight jealousy and ill-feeling is unfortunately the result. Miss Spruce is moved to compare the face of the Waterwagtail to a quince with the quartan ague, a compliment which that lady retorts by declaring that the complexion of Miss Spruce—a maiden, as we are elsewhere informed, sweeter scented than the orange-flower—is little if at all superior to a mass of ill-kneaded dough. A hurlyburly ensues, and a policeman or dog-tick—one of his many synonyms in Spanish slang—appears in the distance ; but, says Trampágos, he will not squeak, for he has been well greased.

Finally the widower selects Miss Spruce to supply the place—vacant, alas! but a single afternoon—of the accomplished Periconia. The nuptials are to be celebrated at once, and the bereaved one pledges, without any apparent sorrow, his whole suit of mourning for a sack of wine. After the smell of the wine come the musicians, and one Escorraman, a well-known character to the student of Quevedo. He enters on the stage in a convict dress and with chains about him, having escaped from the galleys and made a vow to hang both his raiment and his fetters on the holy walls of a certain hermitage, as Horace hung, metaphorically, his wet weeds, after escaping shipwreck from the love of Pyrrha, on the wall of the temple of the great God of Sea. This guest dances several figures, each one of which has now become a matter of antiquarian, if any, interest, and the hero of the piece congratulates himself that his marriage feast has been better celebrated than that of Orlando.

This interlude is distinguished by its vivacity, and the leading part is especially worthy of competition among the *Farandula*, the old Castilian name for a company of actors. It is plentifully salted with slang, and bears much the same relation to the novel of *Rinconete and Cortadillo* as the early dramatic sketch of Milton to “*Paradise Lost*.” As a drama it is not defective; the incidents are amusing and not disconnected. The pearls are pretty, and they are happily strung. It is not here as in some of Cervantes’ pieces, where the events have no greater natural relationship than the figures which sometimes meet on a sign-board, or the diverse commodities which decorate the shop window of a village grocer. The whole piece is compact of knavery, and there is no *souffçon* of antagonistic honesty to spoil it, like the pepper in the cream tarts of *Bedreddin*.

“What devil has donned your tongue?” asks Mr. Frog of the sub-sacristan in the “Election of the *Alcalde*” in the little village of Toledo; and the same question is asked with at least equal reason in the “Two Talkers.” He of whom it is asked is the lineal ancestor of the Aristotelian Doctor Pancrace in “*Le Mariage Forcé*” of Molière. As Pancrace, by the various subtleties of the scholastic philosophy, drives Sganarelle to despair and casting of stones, so does his predecessor Orlando make Sarmiento or Vine-shoot, in the hope that one babbler may cure another, introduce him to his wife. The lightest touch sets off Orlando like an alarm bell. On the merest hint from Sarmiento, he speaks an infinite deal of nothing. He is persistent as a fly on a hot afternoon of August. He dilates upon the three faculties of the soul, Alexander the Great, the letters of the alphabet, the Catiline conspiracy of Terence, the virtues of wine, the

twelve peers of France, and Queen Penthesilea. The unhappy hearer at last desires him to go to the devil. "Devil, said your worship," replies Orlando, "and your worship said well. For the devil tempts us with sundry temptations, and of these temptations the flesh is the greatest. Flesh is not fish ; fish is phlegmatic. The phlegmatic are not choleric ; choleric is one of the four elements of which man is composed ; the others are blood, phlegm, and melancholy. Melancholy is not joy, for joy consists in the having of money. Money makes the man ; men are not beasts . . ." And upon this Sarmiento introduces him to his wife. That garrulous lady makes loud lamentation, what time she cannot get in a word. "He shall be my guest," says the now exultant Sarmiento, when requested to remove him in five minutes,— "he shall be my guest for seven years." Whereupon his wife displays the colours of defeat by hanging out her tongue and faints away. An Alguacil, who is almost as much a necessity as a musician in an entremes, comes in search of Orlando, who has added petty larceny to loquacity, to his multitude of words a sin. The husband hides him under some mats. The wife, supposing her rival to have been removed, resolves to give herself wordy satisfaction for her compulsory silence. "Silence! said your worship," cries the irrepressible Orlando, poking his head from under the mats, "and your worship said well. For silence has ever been praised by the wise, and these sometimes speak, and sometimes are silent, seeing that there is a time to be silent and a time to speak, and silence gives consent, and consent" But here the wife considers it necessary to commence dusting the mats. Orlando lifts up a wailing, which betrays him to the Alguacil, who is prevented from carrying him off to prison only by his promise to cure the Alguacil's wife, who unhappily is also sick of the same infirmity, hypertrophy of the tongue. The interlude concludes, of course, with the inalienable music and obligato rhymes, wherein an epitaph is composed for Orlando, to the effect that, when dead, he will not be so silent as he was talkative when alive. An opera, "*Les Bavards*," was represented some few years back at the Bouffes-Parisiens, with the music of Offenbach, which adhered pretty closely to this entremes.

Of the two remaining farces which have been printed with the entremeses of Cervantes, the "*Prison of Seville*" and the "*Hospital of the Ill-humoured*," there has been much critical doubt as to the paternity. The latter is the more worthy of him. It represents the examination by a Rector, Doctor, and Secretary of certain ill-humoured, whimsical hypochondriacs, *podridos*, for admission to the hospital established in their behoof. The various patients pass in

succession before the board. One, with the familiar name of Cañizares, is sick of the sight of man, and becomes moth-eaten at the appearance of an individual who insists on wearing slippers in the dog-days. This person, it turns out, has been appointed to an office for which Cañizares was himself a candidate. Another patient is unable to eat, drink, or sleep, because of certain ill-conceived couplets in some Christmas carols, which seem to have been in Cervantes' time, as in our own, about equally compact of irreverence and absurdity. The Rector remarks that probably the author's brains were frozen by the season of their composition. Another patient is outraged by those who eat with bibs. For this patient the Rector recommends—it is not easy to see on what therapeutic principle—a clyster of poets' brains. But the Secretary objects that of these there are not in all the world enough to fill half a nutshell. The next patient is aggrieved because a pretty girl has fallen in love with a bald-headed gentleman wearing an eye-glass. Then comes one lifting up his voice against large noses, which occupy the whole of a narrow street, and necessitate handkerchiefs not unlike a ship's sails. This patient will remind the reader of the well-known satire of Quevedo. At last a married couple appears. Curiously enough, they cannot agree. "Black eyes are all the fashion, and my wife has blue," says the husband. "Your mouth is as wide as a portable oven," rejoins the wife. Then the Doctor becomes ill-humoured at the bad taste of the woman who has wedded a man like a beetle, and is elected to the hospital by the Rector, who in his turn becomes ill-humoured at this want of sense in the Doctor, and is elected by the Secretary. Soon afterwards the Secretary elects the blue-eyed wife, who has become ill-humoured at the want of respect shown by him to his Rector. And the Secretary, becoming ill-humoured at the calmness with which the husband contemplates his wife's condition, is in his turn elected by the husband, who, remaining alone like Marius at the ruins of Carthage, consoles himself with the concluding song to the usual guitar accompaniment. Part of this song is an admirable exponent of the philosophy of indifferentism. The burden is, "Let none become ill-humoured at the actions of others." "Life," sings the solitary husband, "is like a game at cards, in which each has his own value, great or small, and plays his own part. Let us therefore allow every one to live after his own fashion, however mistaken it may seem to us. Let the companion of those that feed on barley"—an elegant Oriental equivalent for an ass—"boast himself to be drunken with the waters of Hippocrene." The original here makes use of an expression more powerful but less decent. "Let a woman

with the face of a fiend imagine herself, with the aid of rouge and pearl-powder, to be an angel. . . . Follow my example : when I find two men fighting in the street, I lock up my sword. I do not annoy myself because the saucy astrologer lies in his almanac. Let it rain on my new shoes in the noon-day sunshine, a marvellous mishap ! Let my coat prove a misfit after my tailor has cabbaged half my cloth. Let my comedy be a success, or let folks say it is rubbish. Let them come to see it, or let them keep away. Let them listen to it in silence, or chatter incessantly. I shall not become ill-humoured, nor, though they call me a salt dried cod-fish, put a conclusion to my content." This character of a Roger Bontemps of Spain is excellently amplified by a companion of Cervantes in Seville, Ruiz de Alarcon, in his famous comedy of "Don Domingo de Don Blas." Don Domingo abounds in other eccentricities, such as eating only when hungry, and not because a clock strikes, dressing for comfort, and not for fashion ; but, on one occasion when the Prince has invited him to take part in a bull-fight, he uses almost the same words as the character quoted in the Entremes : " In what have I offended him, that he should wish to see me rolling on the ground ? The man who exposes his life without necessity is a fool. To avoid all risk, I never attempt to make peace between two street brawlers. Why should I interfere with a bull who has done me no harm ? " He is not, however, deficient in courage when the *pundonor* requires it, as the sequel shows.

The chief interest of the " Prison of Seville," an entremes of the genre picaresque, consists in its representation of the manners and customs of criminals, in letters of ancient slang which it is seldom easy to decipher. Familiarity with this slang, of which there are many instances in the works of Cervantes, was the only passport into *La Hampa*, or the Fraternity of Bullies. He who excelled in it was called Black, to a novice the name of White was given. A very short sample of it will probably suffice the most inquisitive. Here is the description, set in the mouth of one of his comrades, of the first character in the " Prison of Seville." He was " the little crown of giants, Murcians, early risers, bristles, pumpkins, eagles, eaglets, tricks, jests, discoveries, lights, needle-makers, and shoe-horns." All these terms have, of course, a second intention. Bristles, for instance, are thieves provided with knives ; needle-makers are burglars, men who make a hole in a wall either to get in or to get out ; and shoe-horns are the servants of the society. The interlude gives a lively account of certain curious preliminaries to a criminal's execution. They are treated in a graphic style, and were doubtless the result of

the author's own experience as an eye-witness. The reader will remember that it was this very prison of Seville, "where all inconvenience holds its seat, and where every unhappy noise makes its habitation," which knew Cervantes for one of its inmates at the close of the 16th century, and was the birthplace of the renowned Don Quixote. The curtain rises to the confused noise of fetters and guitars. Paisano, the protagonist, and two of his associates, men whom he honours with the appellation of Galician jackdaws, are discovered singing songs concerning their captivity, in a spirit very far different from that of the daughters of Zion. Tired of music, they next occupy their leisure with cards, staking such garments as they possess, till at last one unlucky wight is all but reduced to the earliest fashion of apparel. "If I lose this bout," he cries, bewailing his ill-fortune, "nought remains for me but to retire to my *rancho*, and array myself with a fig-leaf." Enter the Alcalde to read to Paisano his sentence of death; he is politely but urgently requested by the condemned one not to interrupt the deal. The worthy magistrate is shocked at such disgraceful levity. At last he is permitted to read, what time Paisano calmly continues shuffling. Little concerned is he, indeed, about his fate, either in the present or the future. "*Me voy*," he says in his own reverent language, "*me voy á poner bien con el Sempiterno*." Two ladies, whom he compliments with the title of *bujarras*, come to see him for the last time. One of these, his latest love, he leaves as a legacy to a surviving friend. "When I give up my soul," says he, "let her give up her body." The other lady he also endeavours to console with the offer of a substituted husband; but she, with a woman's forethought, has already, he finds to his extreme disgust, provided herself with such an article. This is an excellent but ancient piece of humour. In the next scene Paisano appears clothed in the condemned dress, the white gown of charity, with a cross in his hand, surrounded by all his fellow-prisoners—as many, says Cervantes, as can be got on the stage—holding lighted candles, and singing litanies in a loud voice. The chief of these, after some little modest dispute as to who is the chief, makes Paisano what the French call a *compliment de condoléance*. The condemned replies with proper courtesy, alluding incidentally to some kind offices which he would have performed for the magistrate, lawyer, and others concerned in his condemnation, had he once escaped from the purgatory of the gaol to the heaven of the highway. These posthumous benefits he is compelled to delegate to his successor. At the last moment he is reprieved, solely, apparently, to introduce the music, and the song, and the

dance, and the noisy mirth, and the fleering jollity which forms, as the reader has perhaps observed, the established end of an entremes. Cervantes, like Dryden, had his Dalilahs of the stage, and these conclusions were of them. But he managed generally to keep clear of the final cudgelling, which he expressly condemns, not only in the *Grand Sultana*, but by a passage in his novel of the "Colloquy of the Two Dogs," in which Berganza, one of the dogs, having entered the service of a stage manager, becomes a great *entremista*, and with a bridle of selvage is taught to attack any obnoxious character. "So," says he to his companion Scipio, "as these interludes usually end in cudgellings, they used to hiss me on, and I attacked and ill-treated everybody indiscriminately, thereby causing no little laughter among the illiterate, and making much money for my master."

If these customary conclusions were an integral part of these minor pieces of Cervantes, and not mere tags and gags to please the groundlings, they might account in some degree for the oblivion into which his interludes have long since fallen, an oblivion of which the cause is not easily ascertained. Even though, with Don Blas Nasarre, we regard all the dramatic works of Cervantes as parodies of the stage plays of his time, the force, felicity, and fire of these dwarf burlesques will be none the less apparent. Sancho may have been intended as a mock of squires, but he is none the less amusing. True, there will not be found in any of these entremeses that inane and exaggerated imitation of low actions and vulgar words which, as some ill-natured critics assert, is alone able to awake the interest of the vast majority of a modern audience. But, *en revanche*, we shall hear simple and familiar language, and taste in its purity the old and true Castilian idiom. The plots, though slight, are novel and instructive, the character is carefully distinguished, the dialogue naturally expressed. Wise saws and modern instances, witty proverbs and maxims of morality, meet the attentive eye on every page. The entremeses of Cervantes will bear examination, and not make us wonder in a second reading what we could find in them in the first to admire. Fine and white and well-coined, like the money which the long-bearded old man gave to the barber's brother, Alcouz, for his daily supply of mutton, they will not appear on after inspection as clipped-round leaves. Their subjects are light but valuable, their workmanship small but exact. They resemble those engraved gems of the once famous Pyrgoteles, of whom we now know nothing save that to him alone was accorded by Alexander the privilege of representing his august features on rings of ruby, or amethyst, of sardonyx or carnelian.

DEGENERATION.

IT cannot be gainsaid that a survey of the fields of life around us impresses one with the idea that the general tendencies of living nature gravitate towards progression and improvement, and are modelled on lines which, as Von Baer long ago remarked, lead from the general or simple towards the definite special and complex. This much is admitted on all hands, and the ordinary courses of life substantiate the aphorism that progress from low grades and humble ways is the law of the organic universe that hems us in on every side, and of which, indeed, we ourselves form part. The growth of plant-life, which runs concurrently with the changing seasons of the year, impresses this fact upon us, and the history of animal development but repeats the tale. From seed to seed-leaf, from seed-leaf to stem and leaves, from simple leaves to flower, and from flower to fruit, there is exhibited a natural progress in plant existence, which testifies eloquently enough, by analogy at least, to the existence of like tendencies in all other forms of life. Similarly, in the animal host, progressive change is seen to convert that which is literally at first "without form and void" into the definite structure of the organism. A minute speck of protoplasm on the surface of the egg—a speck that is indistinguishable, in so far as its matter is concerned, from the *materies* of the animalcule of the pool—is the germ of the bird of the future. Day by day the forces and powers of development weave the protoplasm into cells, and the cells into bone and muscle, sinew and nerve, heart and brain. In due season the form of the higher vertebrate is evolved, and progressive change is once more illustrated before the waiting eyes of life-science. But the full meaning of most problems which life-science presents to view is hardly gained by a merely cursory inspection of what may be called the normal side of things. The by-paths of development—more frequently, perhaps, than its beaten tracks—reveal guiding clues and traces of the manner in which the progress in question has come to pass. So, also, the side avenues of biology open up new phases of, it may be, the main question at issue, and may reveal, as in the present instance, an interesting reverse to the aspects we at first

deem of sole and paramount importance. For example, a casual study of the facts of animal development is well calculated to show that life is not all progress, and that it includes retrogression as well as advance. Physiological history can readily be proved to tend in many cases towards backsliding, instead of reaching forwards and upwards to higher levels. This latter tendency, beginning now to be better recognised in biology than of late years, can readily be shown to exercise no unimportant influence on the fortunes of animals and plants. In truth, life at large must now be regarded as existing between two great tendencies—the one progressive and advancing, the other retrogressive and degenerating. Such a view of matters may serve to explain many things in living histories which have hitherto been regarded as somewhat occult and difficult of solution; whilst we may likewise discover that the coexistence of progress and retrogression is a fact perfectly compatible with the lucid opinions and teachings concerning the origin of living things which we owe to the genius of Darwin and his disciples.

A fundamental axiom of modern biology declares that in the development of a living being we may discern a panoramic unfolding, more or less complete, of its descent. "Development repeats descent" is an aphorism which cultured biology has everywhere writ large over its portals. Rejecting this view of what development teaches, the phases through which animals and plants pass in the course of their progress from the germ to the adult stage present themselves to view as simply meaningless facts and useless freaks and vagaries of nature. Accepting the idea—favoured, one may add, by every circumstance of life-science—much that was before wholly inexplicable becomes plain and readily understood. And the view that a living being's development is really a quick and often abbreviated summary of its evolution and descent, both receives support from and gives countenance to the general conclusion that life's forces tend as a rule towards progress, but likewise exhibit retrogression and degeneration. If a living being is found to begin its history, as all animals and plants commence their existence, as a speck of living jelly, comparable to the animalcule of the pool, it is a fair and logical inference that the organisms in question have descended from lowly beings, whose simplicity of structure is repeated in the primitive nature of the germ. If, to quote another illustration, the placid frog of to-day, after passing through its merely protoplasmic stage, appears before us in the likeness of a gill-breathing fish. (Fig. 1), the assumption is plain and warrantable that the frog race has descended from some primitive fish stock, whose likeness is reproduced with greater

or less exactness in the tadpoles of the ditches. Or if, to cite yet another example, man and his neighbour quadrupeds (Fig. 2), birds,



FIG. 1. DEVELOPMENT OF FROG.

and reptiles, which never breathe by gills at any period of their existence, are found in an early stage of development to possess "gill-arches" (g), such as we naturally expect to see, and such as we find in the fishes themselves, the deduction that these higher animals are descended from gill-bearing or aquatic ancestors admits of no denial. On any other theory, the

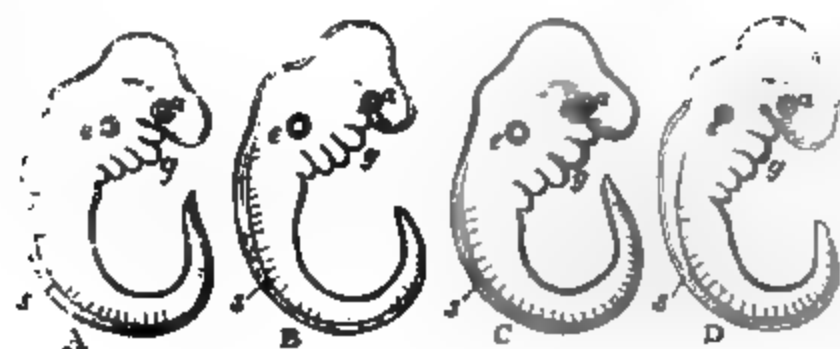


FIG. 2. CALF. (FIG. 2.) RABBIT. MAN.

existence of gill-arches in the young of an animal which never possesses gills is to be viewed as an inexplicable freak of nature—a dictum which, it is needless to remark, belongs to an era one might well term prescientific, in comparison with the "sweetness and light" of these latter days.

Hanging very closely on the aphorism respecting development and its meaning, is another biological axiom,

well-nigh as important as the former. If development teaches that life has been and still is progressive in its ways, and that the simpler stages in an animal's history represent the conditions of its earliest ancestors, it is a no less stable proposition that at all stages of their growth living beings are subject to the action of outward and inward forces. Every living organism lives under the sway and dominance of forces acting upon it from without, and which

it is enabled to modify and to utilise by its own inherent capabilities of action. It is, in fact, the old problem of the living being and its surroundings applied to the newer conceptions of life and nature which modern biology has revealed. The living thing is not a stable unit in its universe, however wide or narrow that sphere may be. On the contrary, it exists in a condition of continual war, if one may so put it, between its own innate powers of life and action, of living and being, and the physical powers and conditions outside. This much is now accepted by all scientists. Differences of opinion certainly exist as to the share which the internal constitution of the living being plays in the drama of life and progress. It seems, however, most reasonable to conclude that two parties exist to this, as to every other bargain; and regarding the animal or plant as plastic in its nature, we may assume such plasticity to be modified on the one hand by outside forces, and on the other by internal actions proper to the organism as a living thing. Examples of such tendencies of life are freely scattered everywhere in nature's domain. For instance, we know of many organisms which have continued from the remotest ages to the present time, without manifest change of form or life, and which appear before us to-day the living counterparts of their fossilised representatives of the chalk or it may be of Silurian or Cambrian times. The lampshells (*Terebratula*) of the chalk exist in our own seas with well-nigh inappreciable differences. The *Lingula* or *Lingulella* (Fig. 3, *a*), another genus of these animals, has persisted from the Cambrian age (*b*, *c*) to our own times, presenting little or no change for the attention of the geological chronicler. The curious king-crabs or *Limuli* (Fig. 4) of the West Indies are likewise presented to our view, with little or no variation, from very early ages of cosmical history; and of the pearly nautilus (Fig. 8)—now remaining as the only existing four-gilled and externally shelled cuttlefish—the same remark holds good. The fishes, likewise, are not

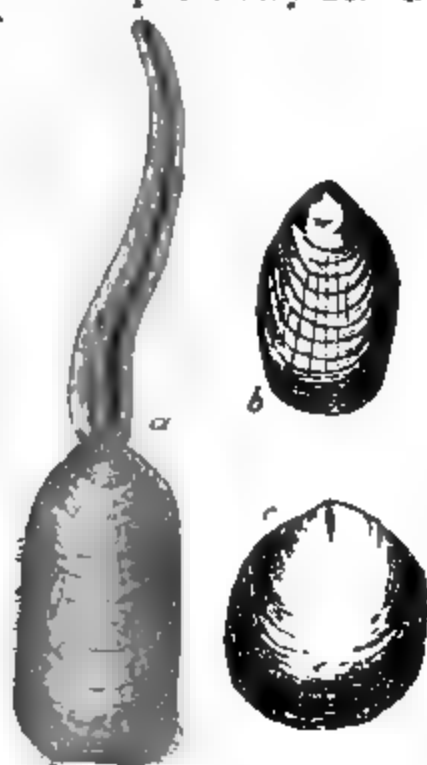


FIG. 3. LINGULA.



FIG. 4. KING CRAB.

without their parallel instances of lack of change and alteration throughout long ages of time. The well-known case of the genus

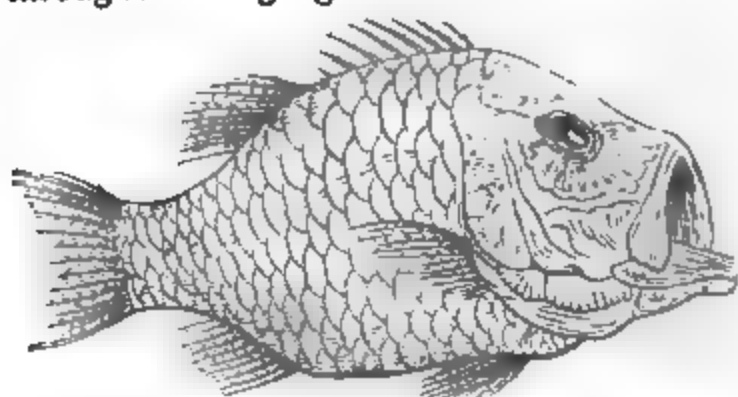
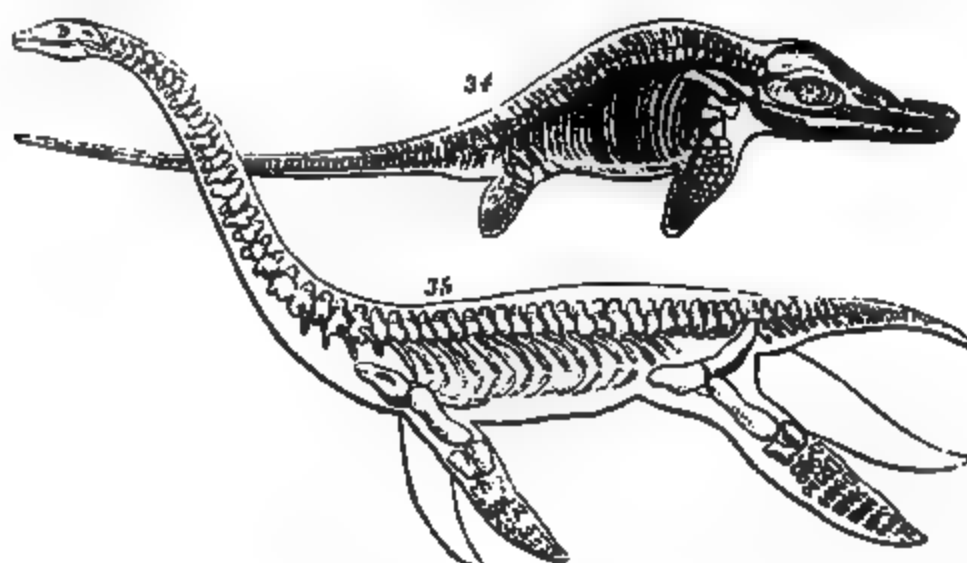


FIG. 5. BERYX.

present day, the genus *Beryx* has therefore undergone little modification or change. The same remark certainly holds good

Beryx presents us with a fish of high organisation, found living in the Atlantic and Pacific Oceans, and which possesses fossil representatives and facsimiles in the chalk (Fig. 5). From the latter period to the



FIGS. 6 AND 7. ICHTHYOSAURUS AND PLESIOSAURUS.

of many of those huge "dragons of the prime" (Figs. 6 and 7), which revelled in the seas of the trias, oolite, and chalk epochs—

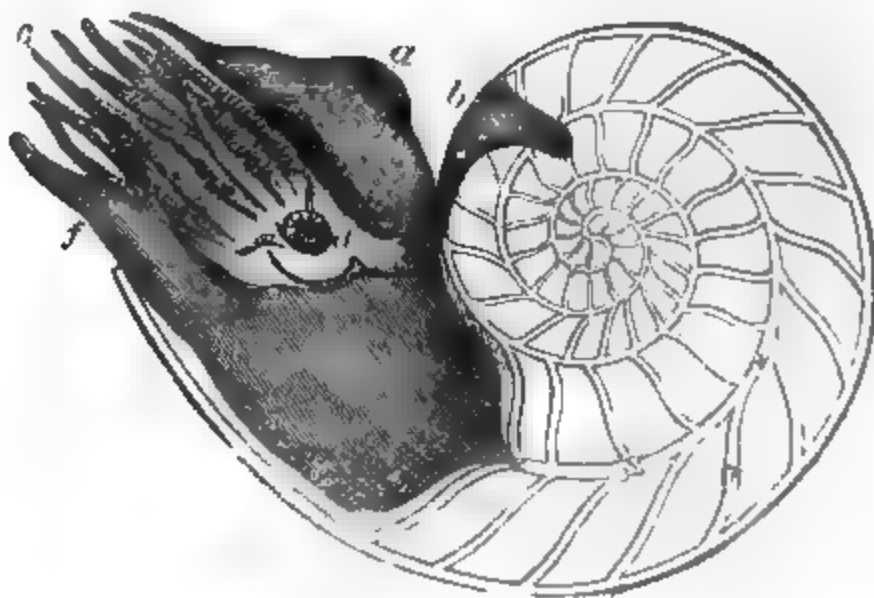


FIG. 8. PEARLY NAUTILUS.

developed in immense numbers in these eras of earth's history, but disappearing for ever from the lists of living things at the close of

the cretaceous age, and exhibiting little or no change during their relatively brief history.

Such cases of stability amidst conditions which might well have favoured change, and which saw copious modification and progression in other groups of animals, might at first sight be regarded as presenting a serious obstacle to the doctrine of progressive development on which the whole theory of evolution depends. As such an obstacle, the series of facts in question was long regarded ; as such, these facts are sometimes even now advanced, but only by those who imperfectly appreciate and only partially understand what the doctrine of evolution teaches and what its leading idea includes. Even Cuvier himself, when advancing the case of the apparently unchanged mummies of Egyptian animals against Lamarck's doctrine of descent, failed—possibly through the imperfectly discussed stage in which the whole question rested in his day—to understand that the very facts of preservation revealed in the monuments of Egypt testified to the absence of those physical changes which could alone have affected the animals of the Nile land. But the fuller consideration of that theory of nature which credits progressive change as the usual way of life, shows us that it is no part of evolution to maintain either that living beings must needs undergo continual change, or that they must change and modify at the same rate. On the contrary, Mr. Darwin, in his classic work, maintains exactly the opposite proposition. There are, in fact, two great factors at work in living nature—a tendency to vary and change, and the influence of environments or surroundings. Given the first tendency, which is not at all a matter of dispute, the influence of the second is plainly enough discernible in bringing to the front either the original, primitive, or, as it might be named, the parent form, or the varying forms which are produced by modification of the parent. As it has well been put : “ Granting the existence of the tendency to the production of variations, then, whether the variations which are produced shall survive and supplant the parent, or whether the parent form shall survive and supplant the variations, is a matter which depends entirely on those conditions which give rise to the struggle for existence. If the surrounding conditions are such that the parent form is more competent to deal with them and flourish in them than the derived forms, then in the struggle for existence the parent form will maintain itself, and the derived forms will be exterminated. But if, on the contrary, the conditions are such as to be more favourable to a derived than to the parent form, the parent form will be extirpated, and the derived form will take its place. In the first case, there will be no progression, no

change of structure, through any imaginable series of ages ; in the second place, there will be modification and change of form." To the same end Darwin himself leads us. In one or two very pregnant passages, the author of the "Theory of Natural Selection" very plainly indicates why progression should not be universal, and why certain beings remain lowly organised whilst others attain to the summit and pinnacle of their respective organisations. "How is it," says Darwin, "that throughout the world a multitude of the lowest forms still exist? and how is it that in each great class some forms are far more highly developed than others? Why have not the more highly developed forms everywhere supplanted and exterminated the lower?" Answering his own queries, Darwin says that natural selection by no means includes "progressive development—it only takes advantage," he remarks, "of such variations as arise and are beneficial to each creature under its complex relations of life. And it may be asked, what advantage, as far as we can see, would it be to an infusorian

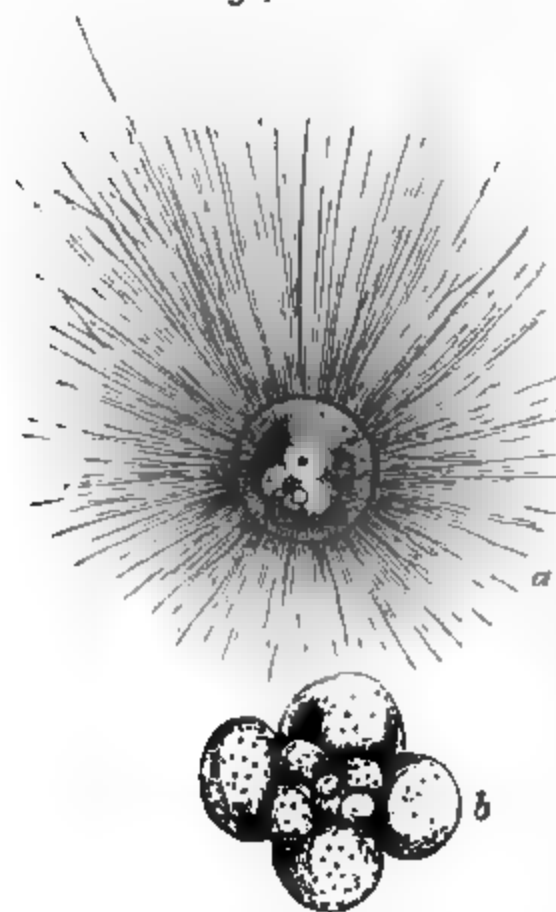


FIG. 9. GLOBIGERINA, ETC.

animalcule—to an intestinal worm—or even to an earthworm, to be highly organised? If it were no advantage, these forms would be left, by natural selection, unimproved or but little improved, and might remain for ages in their present lowly condition. And geology tells us that some of the lowest forms, as the foraminifera (Fig. 9), infusoria, and rhizopods, have remained for an enormous period in nearly their present state. But," adds Darwin, with a characteristically impartial view of matters, "to suppose that most of the many now existing low forms have not in the least advanced since the first dawn of life would be

extremely rash ; for every naturalist who has dissected some of the beings now ranked as very low in the scale must have been struck with their really wondrous and beautiful organisation."

Thus one of the plainest facts of natural history, namely, that in even one group or class of animals we find forms of exceedingly low structure included along with animals of high organisation—the

Apparently diverse bodies being really modelled on the one and the same type—is explained by the consideration that with different conditions, or with various conditions acting differently upon unlike constitutions, we expect to find extreme differences in the rank to which the members of a class may attain. In the class of fishes we find the worm-like clear-bodied lancelet of an inch long associated with the ferocious shark, the active dogfish, or the agile food-fishes of our table. But, as Darwin remarks, the shark would not tend to supplant the lancelet, their spheres and their conditions of existence being of diverse nature. The same remark applies to many other classes of living beings. So that lowly beings still live as such amongst us, and preserve the primitive simplicity of their race, firstly, because the conditions of life and their limited numbers may not have induced any great competition or struggle for existence. On the “let well alone” principle we may understand why some animals, such as the lancelet itself, have lagged behind in the race after progress. Then, secondly, as Darwin remarks, favourable variations, by way of beginning the work of progress, may never have appeared—a result due, probably, as much to hidden causes within the living being as to outside conditions. We may not fail to note, lastly, that the simpler and more uniform these latter conditions are—as represented in the abysses of the ocean, for example—the less incentive is there for the progress and evolution of the races which dwell in their midst.

This somewhat lengthy introduction to the subject of degeneration and its results is in its way necessary for the full appreciation of the fashion in which degeneration relates itself to the other conditions of life. From the preceding reflections it becomes clear that three possibilities of life await each living being. Either it remains primitive and unchanged, or it progresses towards a higher type, or, last of all, it backslides and retrogresses. As the first condition, that of stability, is, as already noted, perfectly consistent with the doctrine of descent, so are the two latter conditions part and parcel of that theory. The stable state forces the animal to remain as it now is, or as it has been in all times past; the progressive tendency will make it a more elaborate animal; and the progress of degeneration will, on the other hand, tend to simplify its structure. It requires no thought to perceive that progress is a great fact of nature. The development of every animal and plant shows the possibilities of nature in this direction. But the bearings of degeneration and physiological backsliding are not, perchance, so clearly seen; hence, to this latter aspect of biology we may now specially direct our attention.

That certain animals degenerate or retrogress in their development before our eyes to-day, is a statement susceptible of ready and familiar illustration. No better illustrations of this statement can be found than those derived from the domain of parasitic existence. When an animal or plant attaches itself partly or wholly to another living being, and becomes more or less dependent upon the latter for support and nourishment, it exhibits, as a rule, retrogression and degeneration. The parasitic "guest" dependent on its "host" for lodging alone, or it may be for both board and lodging, is in a fair way to become degraded in structure, and, as a rule, exhibits degradation of a marked kind, where the association has persisted sufficiently long.

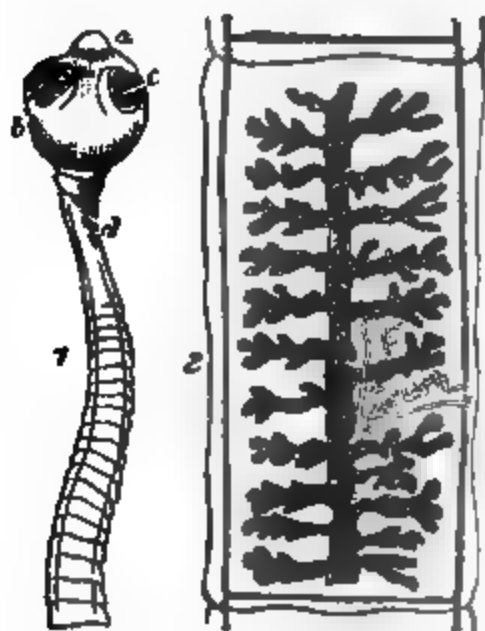


FIG. 10. COMMON TAPEWORM (*Taenia solium*). 1. The head extremity, magnified, showing hooks (a), and suckers (b, c); d, the neck, with immature joints. 2. A joint, largely magnified, showing the branching "ovary," in which the numerous eggs of each joint are matured.

of a free commissariat by the parasite. Organs of sense are not neces-

Parasitism and servile dependence act very much in structural lower life as analogous instances of mental dependence on others act in ourselves. The destruction of characteristic individuality and the extinction of personality are natural results of that form of association wherein one form becomes absolutely dependent on another for all the conditions of life. A life of attachment exhibits similar results, and organs of movement disappear by the law of disuse. A digestive system is a superfluity to an animal which, like a tapeworm (Fig. 10), obtains its food ready-made in the very kitchen, so to speak, of its host. Hence the lack of a digestive apparatus follows the finding



FIG. 11. SACCULINA AND YOUNG.

sary for an attached and rooted animal; these latter, therefore, go by the board, and the nervous system itself becomes modified and altered.

Degradation, wholesale and complete, is the penalty the parasite has to pay for its free board and lodging; and in this fashion Nature may be said to revenge the host for the pains and troubles wherewith, like the just of old, he may be tormented. Numerous life-histories testify clearly enough to the correctness of the foregoing observations. Take, as an example, the history of *Sacculina* (Fig. 11, A), which exists as a bag-like growth attached to the bodies of hermit crabs, and sends root-like processes into the liver of its host. No sign of life exists in a sacculina beyond mere pulsation of the sac-like body, into and from which water flows by an aperture. Lay open this sac, and we shall find the animal to be a bag of eggs and nothing more. But trace the development of a single egg, and one may derive therefrom lessons concerning living beings at large, and open out issues which spread and extend far afield from sacculina and its kin. Each egg of the sac-like organism develops into a little active creature, possessing three pairs of legs, generally a single eye, but exhibiting no mouth or digestive system—parasitism having affected the larva as well as the adult. Sooner or later, this larva—known as the *nauplius* (n)—will develop a kind of bivalve shell; the two hinder pairs of limbs are cast off and replaced by six pairs of short swimming feet; whilst the front pair of limbs develops to form two elongated organs whereby the young sacculina will shortly attach itself to a crab “host.” When the latter event happens the six pairs of swimming feet are cast off, the body assumes its sac-like appearance, and the sacculina sinks into its adult stage—a pure example of degradation by habit, use, and wont. So also with certain near neighbours of these crab-parasites, such as the Lerneans, which adhere to the gills of fishes. Beginning life as a three-legged “nauplius,” the lernean retrogresses and degenerates to become a mere elongated worm, devoted to the production of eggs, and exhibiting but little advance on the sacculina. There are dozens of low crustaceans which, like sacculina, afford examples of animals which are free and locomotive in the days of their youth, but which, losing



FIG. 12. BARNACLES.

eyes, legs, digestive system, and all the ordinary belongings of animal life, "go to the bad," as a natural result of participating in what has been well named "the vicious cycle of parasitism."

Plainly marked as are the foregoing cases, there are yet other familiar crustaceans which, although not parasites, as a rule, nevertheless illustrate animal retrogression in an excellent manner. Such are the sea-acorns (*Balani*), which stud the rocks by thousands at low-water mark, and such are the barnacles (Fig. 12), that adhere to floating timber and the sides of ships. In the development of sea-acorns and barnacles, the first stage is essentially like that of the sacculina. The young barnacle is a "nauplius," three-legged, free-swimming, single-eyed, and possessing a mouth and digestive apparatus. In the next stage we again meet with the six pairs of swimming feet seen in sacculina, with the enormously developed front pair of legs serving as "feelers," and with two "magnificent compound eyes," as Darwin describes the organs of vision. The mouth in this second stage, however, is closed, and feeding is therefore impossible. As Darwin remarks, the function of the young barnacles "at this stage is to search out by their well-developed organs of sense and to reach by their active powers of swimming a proper place on which to become attached, and to undergo their final metamorphosis. When this is completed," adds Darwin, "they are fixed for life; their legs are now converted into prehensile organs; they again obtain a well-constructed mouth, but they have no antennæ, and their two eyes are now reconverted into a minute, single, simple eye-spot." A barnacle is thus simply a highly modified crab-like animal which fixes itself by its head to the floating log, and which "kicks its food into its mouth with its feet," to use the simile and description of biological authority. The development of its "shell" and stalk are matters which do not in the least concern its place in the animal series. These latter are local and personal features of the barnacle tribe. For in the "sea-acorns," which pass through an essentially similar development, there is no stalk; and the animal, after its free-swimming stage, simply glues its head, by a kind of marine cement of its own manufacture, to the rock, develops its conical shell, and like the barnacle uses its modified feet as means for exercising the commissariat and nutritive function. It is true that in some respects the adult barnacle may be regarded as lower than the young, and therefore as a degenerate being. Thus, it is lower when eyes, feelers, and movements are taken into account. In other respects the adult may be considered of higher organisation than the larva. These higher traits we may logically enough suppose represent the special advances

which adult barnacle life has made on its own account. But, on the whole, degradation and retrogression, if not so fully exemplified as in the sacculina, is still plainly enough illustrated in barnacle history. When we further reflect that even such high crustaceans as prawns and allied forms begin life each as a "nauplius" or under an allied guise, we not only merely discover the common origin of all crustaceans in some form represented by the "nauplius" of to-day, but we also witness the possibilities of development which have placed shrimps, prawns, &c., in the foremost rank of the class, and which, conversely, have left the barnacles and sacculinas, through the action of degenerative changes, amongst the groundlings of the group.

The assumption of a sedentary life, whether parasitic in nature, like that of sacculina, or whether it is represented by mere attachment and fixation to some inorganic thing, as in the case of the barnacles, is therefore seen to operate in the direction of producing degeneration of the animal's constitution. The tendency of such habit is towards simplification of structure, and not towards that progressive advance and evolution which, in the case of the higher crustacean races, have evolved from the relatively simple "nauplius" of the past the crabs, lobsters, shrimps, and prawns of to-day.

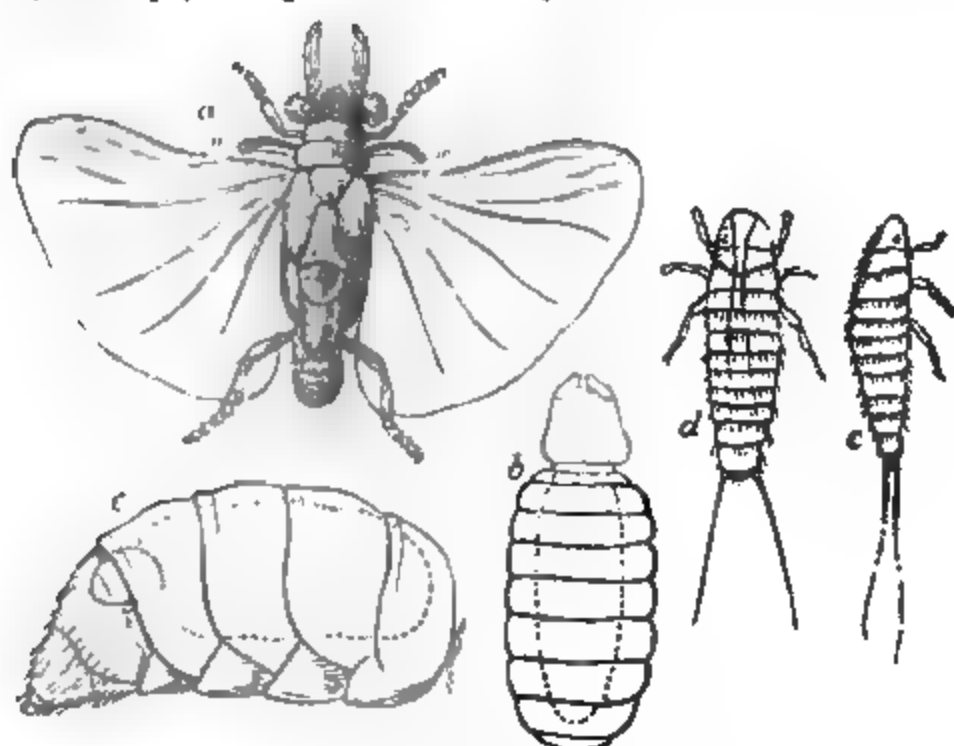


FIG. 13. *STYLOPA*.

(Fig. *c* shows the *Stylopa*, in outline, within the body of the bee; and Fig. *d* shows the *Stylopa* removed from the body of its host.)

In groups of the animal series, however, both nearly allied to the crustacean class, and far removed from it in structure, equally interesting and often curious examples of degradation may be found. The class of insects, and the nearly related group, including the

mites, spiders, and scorpions as its representatives, number in their ranks instances of degraded and degenerate forms. Amongst the insects which are parasitic in habits a notable absence of wings is discernible, and this latter want is seen even in those cases in which one sex alone of a particular insect species assumes the habit in question. An excellent illustration of such a fact, and also of the extreme modification of form which may accompany the degeneracy of highly organised animals, is found in the history of the insects collectively known as Strepsiptera, and of which the genus *Stylops* is the best-known example. The male *Stylops* (Fig. 13, *a*) is an active insect, possessing a single pair of wings. These wings are the hinder pair; the front pair being represented by a pair of twisted organs (*w*), which illustrate wing-degeneration, possibly through disuse. Both males and females, as they leave the egg, are small, active, six-legged beings (*c*, *d*); which crawl about on the bodies of bees. Carried into the hive, the young *stylops* behave like the proverbial viper, injuring the community which gives them shelter by boring their way into the bodies of larval or infant bees. Here the young *stylops*, casting their skin, become in the larval interior sluggish, footless grubs. Each possesses a mouth, small jaws, and a digestive system of simple construction. Meanwhile, bee-development progresses; and as the larval bee passes through its chrysalis state with its *stylops*-lodger contained in its interior, the latter thrusts the front extremity of its body from between two of the hinder body-segments of the bee. Then the male *stylops*, undergoing development in this position, becomes the winged insect (*a*) and passes into the world. The female *stylops* (*c*), on the other hand, remain in their places on the bees. They undergo but a slight change of form, persisting as mere sac-like bodies (*c*), without legs or digestive system (*b*), and develop in their interior the eggs from which succeeding generations of *stylops* will be produced. Such a case of absolute degeneracy is all the more remarkable in view of the facts that it is limited to one sex alone, and that the free-winged males of *stylops* are as highly organised as most of their neighbour insects.

The class of the spiders (*Arachnida*) offers collective examples of degeneration and retrogression, which show how large numbers of animals may acquire lower characters, contrasting with the higher phases to which other members of their class have attained. The mites and ticks have unquestionably originated from the same root-stock as the spiders and scorpions. The development of the two groups proves this much. But whilst the latter animals have

advanced to a high complexity of organisation, the mites and ticks have degenerated into parasitic forms—or at least exemplify beings which, first attaining a respectable rank in their own series, have certainly not advanced upon that rank. Many of the mites, however, exhibit well-marked degeneration. Only on the hypothesis of sweeping retrogression can we account for the singular and anomalous condition in which a certain harmless mite, named *Demodex folliculorum* (Fig. 14), spends its existence. This mite inhabits the sacs or follicles of the human skin at the sides of the nose. It is a minute worm-like animal, possessing eight degenerate rudiments of legs, and a thoroughly rudimentary structure in other respects. Here parasitism has denuded the animal of well-nigh every attribute of its Arachnidan character, and has left it in a condition analogous in many respects to sacculina itself. Of the equally curious *Linguatulina* (Fig. 15) inhabiting the “frontal sinuses” or forehead spaces of dogs, wolves, horses, and sheep, the same remark holds good. The body here is thoroughly worm-like in shape (*b, c*), and a digestive and nervous system are to be enumerated among the possessions of the organism. But not even the rudiments of legs are to be perceived, although the mouth bears certain apologies for the appendages proper to that region in the mite and spider class. Yet the young *Linguatulina* (*a*) exactly resembles the early form of the mites. It possesses two pairs of jointed limbs, and certain style-like organs pertaining to the mouth. There is thus the clearest evidence that *Linguatulina* is a degraded animal.

It is the degenerate descendant of a free living and apparently four-legged—or it may be eight-legged—ancestor; and its further history seems to afford a clue to the causes of its retrogression. For the four-legged larva of *linguatulina* escape whilst still within the egg from the nose of the dog or sheep-host which has harboured their parents. Received, along with food, into the body of the hare or rabbit, the larval being liberates itself. From the rabbit's digestive system it bores its way through the tissues to the liver, thus reminding one strongly of the similar migrations of the embryo tapeworm. In



FIG. 14.
DEMODOX
(magnified).

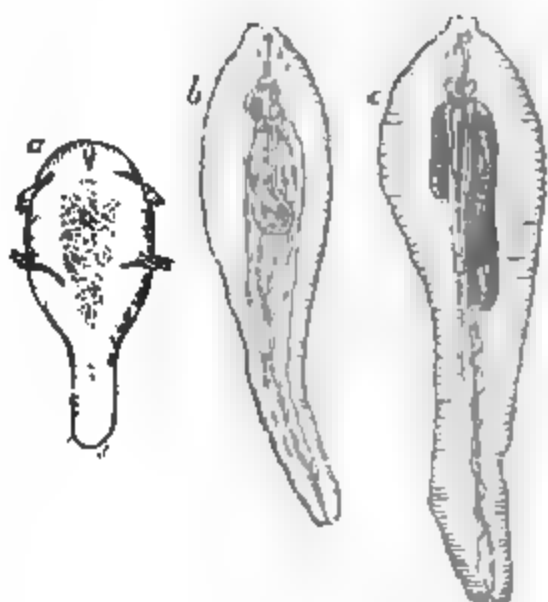


FIG. 15. LINGUATULINA

the liver, further changes ensue. Frequent moultings become the order of the day; and at length they assume a worm-like aspect, and remain thus, still imperfect, until, by transference to the body of dog, wolf, or sheep, and by passage to the frontal sinuses, they acquire perfection of their life-functions. If the history of these beings teaches us anything concerning their past, it points to a free and active state as their original condition, and to the probable acquirement, first, of a lodgment in the digestive system of one animal as a relatively simple

parasite, and secondly, of a further modification of habit transferring at once its perfection and completed degradation to the forehead-cavities of a second host.

But the conditions which make for the degeneracy of an animal are, as we have seen in the case of the barnacles, not always associated with a parasitic habit. Mere fixation, as we have observed, secures the disappearance of useless organs, such as organs of

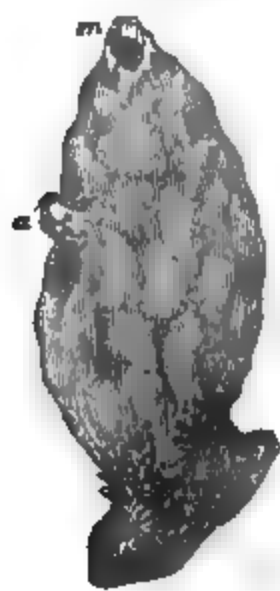


FIG. 16. SEA SQUIRT

motion and sense-organs, which, being possessed by the young form, clearly indicate that the ancestry of the animals in question has at any rate been capable of leading to better things than the descendants represent in their existent persons. The sea-squirts, or ascidians, besides serving as a text for the derivation of vertebrates, and for abnormal ways in the animal chemistry which imitates the plant's work, have been selected as fruitful objects of discussion by those biologists who find in the idea of degeneration an explanation of knotty points in natural history. For the same voice that proclaims the fact that a sea-squirt—which is a mere rooted bag with a double neck (Fig. 16)—begins life as a free-

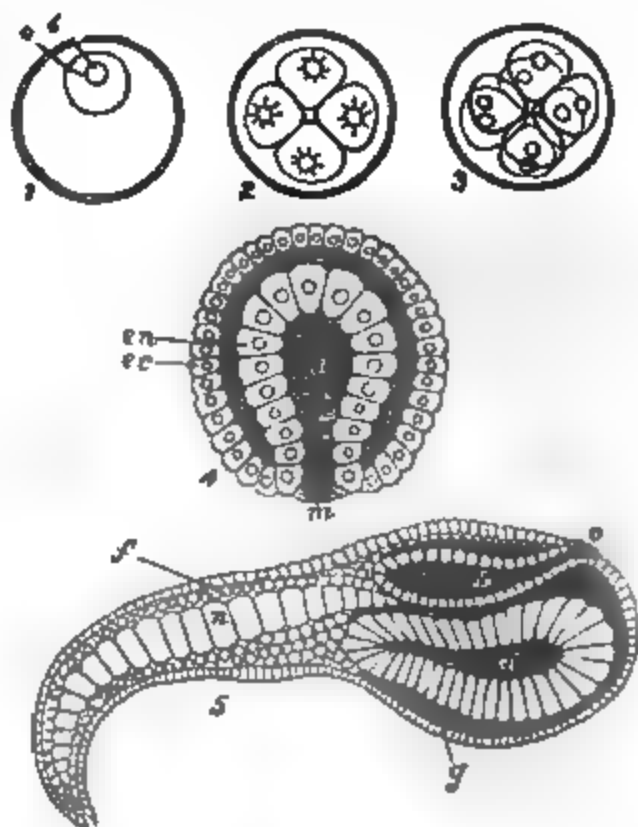


FIG. 17. DEVELOPMENT OF SEA-SQUIRT.

swimming, tadpole-like larva (Fig. 17, 5), tells us in the same breath that there must have been retrogression and degeneration from an active condition to produce the sac-like adult state. The assertion that the youthful sea-squirt, moreover, possesses first a rod-like body—called the *notochord* (Fig. 17, *n*)—only found besides in the young of vertebrate animals, is also to be taken as implying the superiority of ascidian infancy to sea-squirt maturity. And when it is added that the elderly squirt wants the sense-organs and nervous cord which the larva possesses, it may well be argued that sheer degeneracy of habit and structure can alone account for the sweeping transformations which mark the phases of ascidian life history. Thus it is matter of sober natural-history fact that a sea-squirt larva, of all invertebrate animals, is the only being that possesses organs and parts proper to the young vertebrate or to the *adult* form of one lower vertebrate in particular. This adult is the little fish known as the lancelet, which, in the relative simplicity of its organisation, makes a nearer approach to the poor or sea-squirt relations of the vertebrates than any other fish.

The fact of vertebrate and sea-squirt relationship is worth dwelling upon, because the topic unquestionably presents one with a common point of view, whence a survey of the higher development, evolution, and progress of the vertebrates, and a view of the degeneracy and retrogression of the sea-squirts, may best be obtained. Revelling in the freedom of its early life, the larval sea-squirt—presenting, as already noted, a striking resemblance to the tadpole of the frog, in its backbone, its nerve-system, and its breathing-sac, or modified throat—ultimately settles down. Like the youthful barnacle somewhat, the young sea-squirt attaches itself to a stone or shell by the suckers with which nature has provided its head. Then succeeds the disappearance of the tail, with its backbone and its nerve cord, and the body itself soon assumes the sac-like shape that betokens the mature ascidian character. The outer skin becomes tough and leathery, and develops the *cellulose* which, by biological right, we should expect to find in plants alone. Then succeeds the fuller formation of the gill-sac or breathing chamber, and of its neighbour compartment, which receives the effete water of respiration to be ejected by the second mouth of the sac-like body. The eye of the larva likewise disappears, and all that remains to the adult ascidian is a nerve mass, called by courtesy the “brain,” and which serves to regulate the few acts that mark the placid and rooted existence of the race. Attention has been recently directed in a special manner to the resemblance which exists between the eye of the larval sea-

squirt and that of vertebrates—a statement to be taken along with that which conversely declares the unlikeness of the ascidian eye to that of all other invertebrate animals. It is matter of fact that the chief parts of the eye of a vertebrate animal grow inwards as developments from the skin, and unite with an outgrowth from the brain. This outgrowth forms the *retina*, a nervous network of the eye, whereon the images of things seen are duly received for transmission to brain and sensorium. Now, in invertebrate animals the retina is formed from the skin-layer. This latter method of growth, it has been remarked, is a perfectly natural one. It was to be expected that, as the retina is to be affected in the discharge of its duty by light rays, it should form on the surface of the body where the light-rays fall. In the vertebrate, and in the sea-squirt larva, the retina, on the contrary, forms away below the skin surface, and grows outwards from the brain. Why is this so? Professor Ray Lankester maintains that because the ascidian larva is perfectly transparent, the light-rays pass through to its brain eye, and thus give rise to sensations of sight. Hence, if the original and primitive vertebrate animal or rootstock were like the larval sea-squirt, as we suppose it to have been, its body would be transparent, and its eye or eyes, situated on its brain, would receive light-rays through its clear body. But as the evolution of the vertebrate race proceeded, the tissues became firmer and denser. By “natural selection”—or, in other words, by the exercise of accommodating power to function—the eyed region of the brain would tend to grow more and more toward the body's surface, to receive the rays of light. As development, therefore, proceeded, the mode of growth of the vertebrate eye would be adapted to the exigencies of its new surroundings. Thus, to-day, the vertebrate eye grows from without inwards, because light-rays strike naturally on the outer surface of the body. But it likewise grows from within outwards as well, because of the ancestral and hereditary tendencies which cause it to repeat in the individual growth the passage to the surface it had to make in the evolution of the race. If one might add a suggestion to such an explanation, it would consist in an endeavour to account for that affinity between brain and outer surface of body which we see to exist. Why the brain should grow outward, as it does in eye, ear, and nose likewise, to connect with the body's surface, and so to form organs of sense, is plain enough. We must bear in mind that the brain itself is formed from the outer layer or *epiblast* of the larva, and from the same layer which develops into the skin. Brain and skin, to begin with, arise from the same layer. Hence, before even the matter of eyes falls to be considered,

the affinity of the skin layer and the nervous system is a fact worth noting. It is this truest of relationships which may reasonably enough explain, not merely why the sense organs arise from the skin surface, but also why the brain grows outwards to meet with the structure to which it is so near akin.

Degeneration of a very pronounced kind thus accounts for the peculiarities of sea-squirt structure to-day. The case of ascidian retrogression is likewise the more interesting, seeing that its reverse side is that of progressive evolution and development of the highest forms of life the existing world knows. It is therefore important to note in passing that the possibilities of development may include degeneration of a very marked type, along with progressive evolution of equally pronounced kind. The category of life's extension includes, in fact, many possibilities which at first sight might appear of most unlikely kind ; and amongst these possibilities, that of extreme degeneration is by no means the least notable as an element in inducing the material variety of life we behold in the animal and plant worlds of to-day. The list of causes which lead to the degeneration of living beings includes, however, other fashions of producing retrogression than by fixation and parasitic habits, and operates in different ways upon organisms of varied structure and social or biological rank. Changes in food and feeding may thus accomplish degeneration and induce physiological backsliding of the most typical description. It is a familiar fact that the animal organism is of relatively higher nature than the plant, seeing that the animal frame can, as a rule, feed upon and build up its tissues from organic or living matter only. Animals, in other words, demand the substance of other animals or of plants, or of both combined, as a necessity of their commissariat arrangements. Plants, on the other hand, are specially constructive and elaborative in their feeding. They build up from the non-living matters around them—carbonic acid, water, ammonia, and minerals—the tissues of their living bodies. They "transubstantiate" this non-living matter into living tissue ; and the verdant tints of spring, the full glory of the summer's blossom, or the mellow ruddiness of autumn's fruits, represents, each in its way, the result at once of the plant's constructive chemistry and of the elaboration into living matter of the inorganic materials of air and soil around.

The animal frame therefore presents us—amid exceptions to the above rule in both animal and plant series—with relatively greater complexity of organs and tissues than the plant body presents. This statement simply re-echoes what commonplace observation daily demonstrates. Hence, it may be a natural

enough inference that whatever causes tend to bring the animal feeding nearer in type to that of the plant will tend to simplify animal structure, and so to produce retrogression and degeneration of the animal type. Many animals are thus known to develop *chlorophyll*, or the green colour we see characteristically in every leaf. Through the combined operation of this green colour—either singly or aided by the leaf protoplasm—and the action of light, plants decompose the carbonic acid of the air, as every schoolboy knows, and, retaining the carbon to aid in the formation of starch, set free the oxygen, which thus returns to the atmosphere, and is welcomed by the animal hosts. The hydra, or common fresh-water polype (Fig. 18), many animalcules, and certain worms of a low type possess this chlorophyll. Like dishonest manufacturers, they seem to have infringed the patent rights of the plant to elaborate this green



FIG. 18. HYDRA. (In both figures young hydræ are represented budding from the side of the parent.)

colour. And it is no longer matter of theory, but ascertained fact, that these green animals are capable, like the plants, of absorbing carbonic acid—usually a fatal gas to the animal constitution—and

of elaborating starch therefrom like their plant neighbours. Thus a simpler mode of feeding, obviating the necessities of animal existence in the way of digestive apparatus, has apparently led to the simplification of structure. Degeneration has followed in the worms just mentioned, as the result of their imitation and acquirement of vegetative powers of feeding; and it is probable that other alterations in the way of dietary, of less sweeping character than that just mentioned, will affect, in like retrogressive fashion, the animal constitution.

Some of the most curious cases of degeneration known to us illustrate the total disappearance of digestive apparatus even in some beings, in which, as in the stylops already mentioned, one sex becomes retrogressive whilst the other sex remains structurally fully developed. Such a case is illustrated by the males of those remarkable organisms, the *Rotifera*, or "wheel animalcules" (Fig. 19). These minute creatures, inhabiting our fresh waters, may

be desiccated and dried, and revived, on the application of moisture, many times in succession. But in their ordinary existence, and in the details of their structure, the "wheel animalcules" present details equally interesting with their exhibition of "potential vitality." The female animalcules possess a complete digestive system, a set of water vessels, a nervous ganglion, and other belongings; but their partners are decidedly inferior creatures, since their digestive system becomes totally abortive, whilst in size the males are likewise far excelled by the lady rotifers. How this degeneration and disappearance of digestive apparatus and the inferiority of size have been produced in the male rotifers may be a matter regarding which difference of opinion will certainly exist in biological minds. The fact that retrogression is here illustrated, however, cannot be questioned. It may also be added that, in all probability, the extreme development of the function of perpetuating the species,

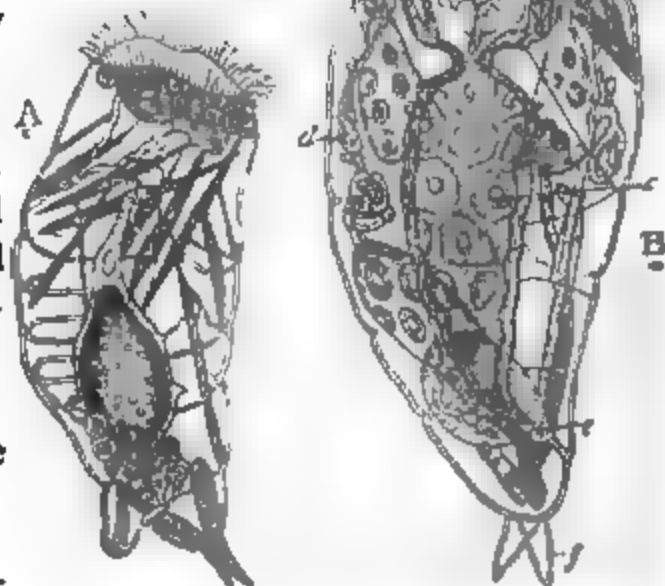


FIG. 19. ROTIFERA.

and the extraordinary fertility of production witnessed in these animalcules, may satisfactorily account for the abrogation of digestion in favour of reproduction. Thus, to the other causes of degeneration in animal life and structure, we may append that which takes origin from the extreme or excessive development of one function over another. Physiological development in one direction, overstepping the natural and ordinary limits, runs concurrently with destruction of life's equilibrium, and naturally tends to produce degeneration and simplification of other organs and other duties of life.

How far the theory of degeneration we have thus briefly discussed may be applied in explanation of the peculiarities of animal structure, remains as a task for the future of biology to satisfactorily determine. Possibly the corrections which the future of every hypothesis carries with it may be many and sweeping. The deductions and inferences we extract from a study of degeneration to-day may perchance be

falsified by the higher and newer views of the to-morrow of biological science. But enough has been said to show that, even in a cursory review of the doctrine of degeneration and retrogression, many phases of living histories become theoretically plain ; and it argues hopefully for the correctness and value of the doctrine before us that it has, so far as it has been logically pursued, fitted compactly and harmoniously enough with ascertained facts and with received views of the origin of animals and plants. That higher forms of life than the sea-squirt and insect race are by no means exempt from the influence of retrogressive change is an observation worth noting at the close of our researches. We know, for instance, of lowly structures in shell-fish life appearing in the midst of highly organised frames. A mussel, a cockle, or an oyster, whose early development runs in parallel lines to that of the snail and whelk-class, is nevertheless esteemed less highly organised than the latter. The mussel or oyster-tribe possess no head : the snails and their allies, as every one knows, not merely exhibit a well-developed head, but have that extremity provided with eyes, tentacles or feelers, and other addenda of the front region of the animal body. Hence it is more than probable that the mussel, headless and inclosed in its shell, and possessing relatively little interest in the affairs of the outer world, is an example of a degenerated type of molluscs. The mussels and their relations stand, in fact, at the opposite extreme of development in this respect from those well-known molluscs the cuttlefishes. In these creatures, the tendency to head-development—or what Professor Dana calls “cephalisation”—reaches its maximum, as any one may readily enough suppose on looking at an octopus or squid, with its great head, its enormous eyes, and its nerves massed together to form a brain inclosed in a kind of skull. Even as compared with the earlier cuttlefishes—whose shells, under the name of ammonites and the like, we find fossilised in large numbers—the squids and cuttles of to-day present, in the extreme development of head, a noteworthy advance. Thus, whilst the one molluscan tribe of mussels and their neighbours has degenerated and gone to its own lowly place in the series, other groups starting on an equal footing have advanced, and, through progressive evolution, have produced those higher manifestations of molluscan life that teem in the seas of to-day. Even amongst the vertebrate animals we meet with examples of degenerative tendency which are not so easily explicable as the foregoing illustrations. In most snakes only one lung is fully developed as a rule, the companion organ being rudimentary and degenerate. In birds, the egg-producing organs are

similarly developed on one side only. How degeneration should be thus partial, and affect one-half of an animal's frame, so to speak, is very hard to discover. External conditions of life and the influences of surroundings could apparently possess little effect in inducing such an unsymmetrical retrogression of parts. Most probably we shall find the solution of such conditions to exist within the operation of some deep-seated law of the living constitution, and in the effects of that law in moulding or even contorting the animal frame.

It constitutes one of the chief glories of biological science, as pursued amongst us to-day, that its studies are of far-reaching order, and lead, as the results of their natural extension, to the consideration of fields of thought often widely removed from the original topic which interests the reader. The present subject of degenerative changes, regarded as part and parcel of the living constitution, can readily be shown to possess applications far removed from zoology and botany, and extending into the most intimate spheres and phases of human history itself. Degenerative change in human tissues is medically symptomatic of very many of the ills to which flesh is heir. Tissues and organs degenerate in individual animals, as animal frames retrogress in their entirety. Cells retrograde and fibres degenerate in our bodies, just as the sea-squirt's frame exhibits, as a whole, a universal physiological backsliding. Nor may many of our diseases alone be esteemed mere examples of degeneration affecting our tissues. The termination and decline of life itself, and the age that really "melts in unperceived decay," are in reality examples of natural degeneration also. The decline of existence is largely a retrogression of structure. There can be no such thing as a really "green old age," any more than we can speak of "the sere and yellow" of the autumnal leaf as imitating the verdant nature of the spring blossom. Nay, stranger still is it to discern that the full flush of life's vigour is accompanied by degenerative changes as typical as those which mark life's decline. For every tissue wastes as it works; and cells degenerate, die, and are cast off from every surface and tissue of our frames as the natural result of living and being. "Generally speaking," says a writer in discussing the degeneration of human tissues, "those parts which live most slowly are those of which the duration is the greatest, and in which there is consequently the least frequent change. Of the exuviation of epidermic structures *en masse*—a process altogether comparable to the fall of the leaf—we have striking examples in the entire desquamation of serpents, the moulting of the plumage in birds, and the shedding of the hair in mammalia ;

and in the shedding of the antlers of the stag we have an example of the exuviation of a highly organised and vascular part, which periodically dies, and which, being external, is cast off entire. ‘What means all this,’ says Sir James Paget, ‘but that these organs have their severally appointed tissues, degenerate, die, are cast away, and in due time are replaced by others, which in their turn are to be developed to perfection, to live their life in the mature state, and to be cast off?’” And, again, the same high authority remarks that “it is, further, probable that no part of the body is exempt from the second source of impairment ; that, namely, which consists in the natural death or deterioration of the parts (independent of the death and decay of the whole body) after a certain period of their life. It may be proved, partly by demonstration, and partly by analogy, that each integral or elemental part of the body is formed for a certain natural period of existence in the ordinary conditions of active life, at the end of which period, if not previously destroyed by outward force or exercise, it degenerates and is absorbed, or dies and is cast out ; needing, in either case, to be replaced for the maintenance of health.” To these weighty words we may lastly add the opinion of Dr. Carpenter, who remarks that, “when the adult type has once been completely attained, every subsequent change is one rather of degeneration than of development, of retrogression rather than of advance.”

Degeneration is thus an invariable concomitant of life. So far from being in any way an abnormal phase of living action, it is seen to be as natural a process for living beings to retrogress—wholly, as we have seen in some cases, or partly in others—as it is for them to develop and advance. And what is thus undoubtedly true of the individual man or other animal is no less so of the race. “Buried civilisations” are by no means unknown ; extinct culture is an archæological fact ; the decline and fall of nations is matter of history. May not these things be likewise explained as a part of that wide theory of life which regards even the highest interests of man as lying within the operation and sway of causes which mould his physical organisation ? If this notion be accepted, then is the idea of degeneration as a normal phase of life rendered still more feasible and plain. Reaching to the individual and to the species as well ; extending and including in its scope the lowly organised as well as the higher being ; affecting one group or class lightly, and influencing another well-nigh to the complete exclusion of progress,—we find degeneration and retrogression to be numbered among the stern realities of existence. And no less clearly and forcibly may we trace

the truly natural place of degeneration in our own physical history : since, as physiology teaches and daily experience declares, not an action is wrought or a thought conceived without the presence of change and decay of tissue—a process this which, limited in early life by progressive growth and by development, at last comes in our latter days to assume the reins of government, and in time to dissipate our energy and substance into the nothingness of physical and corporate extinction.

The philosophy of biology, however, may, in conclusion, be found to point out to us that the subject of degeneration, whilst treating of a powerful factor in modifying the living form, yet possesses a favourable aspect in relation to progress and evolution. High authority in matters biological may be found for the statement that degeneration is really a result of progress, that it is dependent on high development, and that, whilst it simplifies the living being, “ it produces the same effect as differentiation, for it leads to variety in form.” Thus there is a kind of evolution and progress inseparable even from degeneration itself. For the retrogression may in itself lead to variety and change, and in due time such variety may be the starting-point of new and higher developments. So, likewise, we are reminded that reduction and degeneration of some parts may proceed contemporaneously with the higher development of others, with the total result of perfecting the organism, and of evolving a higher type of structure. The degeneration of a frog's tail is in reality a feature of its higher type as compared with its tailed friends the newts and salamanders. The disappearance and reduction of the tail which the young crab possesses is a chief reason why we esteem the crab, whose body is all head and chest, a higher animal than the lobster or prawn with head, chest, and tail complete. The degeneration of the “ outside ” gills of the Alpine salamander's young, which never have access to water, is not a mark of inferiority but of superiority ; it is, in reality, the casting-off of the old or larval and aquatic characters and the putting on of the new and higher features of the land animal. Even the degeneration of human structures—the modification of the tail which early human existence exhibits, and of muscular structures well developed in lower life—are no proofs of inferiority, but are evidences of superiority in ourselves. Thus, even in the great work of evolving higher races out of the lower, to degeneration much is owing for its aid in repressing larval characters and the structures which belong to lower existences. Whilst progressive evolution develops the great tree of life, extends each branch, clothes it with verdure, and expands each blossom, it

is degeneration which lops the worn and aged stems, prunes the weakly foliage, trims the budding growths, and so directs and moulds the outlines of the organic whole. It is to evolution and progress that the world of life largely owes its forward march. But hardly less is the debt of gratitude due by the living hosts to degenerative change and retrogression which, though stern and oftentimes cruel in their ways, nevertheless mark wisely and well the pathways of life, and prevent the useless and weak from cumbering the ground.

ANDREW WILSON.

SCIENCE NOTES.

SPHERICAL DUST.

IN the course of a rather famous controversy between Pasteur and Pouchet, carried on not merely by means of words but by actual research, Pouchet discovered that some of the microscopic egg-like particles found in atmospheric dust remained unaltered in size and shape when kept for some time at a red heat in a platinum crucible, and, therefore, argued that they are mineral particles, not organic structures.

Dr. Phipson confirms this, and finds that ordinary fine dust contains not only small angular particles of sand, but also rounded, egg-shaped or globular siliceous particles. He heated micrococci and diatoms (microscopic siliceous vegetables that walk about in water), and found that they do not retain their forms after such treatment, but that the remains of fossil species of these creatures resist the action of heat and retain their forms, and he concludes that the minute siliceous bodies found in the atmosphere are also fossil; that they are micrococci of another age.

This appears to me a rather far-fetched explanation, and I venture to offer the following, which is much simpler, and, I think, more probable :—

We know that when flints, or fragments of rock of any size or hardness, are swept along by water, and thus shaken up together, they become rounded, as we see them on the sea-beach or bottom of a running stream. Siliceous dust particles are but pebbles of smaller size, that are more or less stirred and rolled together as they are swept along by the wind. As the same particles settle on the surface of the ground, and are blown up again and again, and backwards and forwards, there must be among them many that have existed as dust for years or even ages, and thus have become as completely rounded as the pebbles of our chalk-flint shingle.

A patent was secured in America about twelve years ago for pulverising fuel by agitating ordinary coal-dross, or “slack,” in a suitable chamber, whereby it became reduced to a fine powder by

the collision of particles with each other. The result was the production of a fine dust composed of spherical or nearly spherical grains. If coal dust can be thus shaped in a few minutes, sand dust may be in a few years.

INVERTED PHOTOGRAPHS OF THE SUN.

ABOUT seventeen years ago Mr. Nasmyth announced that "the bright surface of the sun consists of separate, insulated, individual objects or *things*, all nearly or exactly of one definite size and shape, more like that of a willow-leaf than anything else." I here quote Sir John Herschel's description,¹ who proceeds to state that these "are evidently the immediate sources of the solar light and heat," and that "we cannot refuse to look upon them as *organisms* of some peculiar and amazing kind ; and though it would be too daring to speak of such organisation as partaking of the nature of life, yet we do know that vital action is competent to develop both heat, light, and electricity." In Herschel's "Outlines of Astronomy" these willow-leaves are pictured most definitely as geometrically regular and uniform bodies, "crossing one another in all directions, like what are called spills in the game of spillikins."

This extraordinary discovery was presently questioned, and these still more extraordinary speculations were refuted by other observations; and the appearances upon which they were based were described as resembling "rice-grains," "crystals," "flocculi," "granulations," "straws," "things," "bits of white thread," "cumuli of cotton wool," "clouds," "excessively minute fragments of porcelain," "untidy circular masses," "things twice as long as broad," "three times as long as broad," "ridges," "waves," "hill knolls," &c. &c.

Here was disagreement among doctors, with a vengeance, not on any abstract conclusion, or profound metaphysical quibble, but on what was visible to different pairs of eyes aided by telescopes. Such conflicting testimonies demand the intervention of some unimpeachable witness. This has been obtained by making the sun draw his own portrait.

The difficulty of doing this has been considerable, on account of the excessive glare of light dazzling the salts of silver as it dazzles our eyes, and producing, under ordinary exposure, a blurred round blotch, such as we see when we dare to blink at the noonday sun.

The indomitable Janssen, who perilled his life by escaping in a balloon from besieged Paris, and then travelled half-way round the

¹ *Familiar Lectures on Scientific Subjects*, p. 83.

globe in order to see an eclipse of the sun, which, after all, the cruel clouds concealed just at the critical moment, has with characteristic perseverance obtained his revenge, and compelled the sun to give his own evidence, in the form of magnificent pictures, that have settled the willow-leaves and many other solar phantasies. When I saw these at the Royal Astronomical Society last year, I could not refrain from a small chuckle, seeing that they strikingly confirm my theoretical conclusion, published eleven years ago, that these mysterious mottlings are tongues of veritable flame, bending over in various directions according to the direction of the rushing cyclones, and other solar storms, that eternally rage in the solar atmosphere above them.

In order to obtain these magnificent pictures, M. Janssen has had to devise special apparatus, that shall limit the exposure to measurable, but almost inconceivably small, moments of time, such as the ten thousandth part of a second, or even shorter periods.

In the course of these struggles with the sun he has made a very curious photographic discovery.

Most of my readers are doubtless aware that in the ordinary course of photography a "negative" picture is first obtained, and a "positive" printed from it. This is a necessary consequence of the primary fact upon which photography is based, viz. that when certain salts of silver are exposed to light, they become darkened in proportion to the degree of such exposure. Hence in the direct pictures the lights are represented by shade and the shade by lights. A picture from this negative reverses the lights and shades again, and thus gives the resemblance to nature.

Such is the ordinary experience of photographers ; but M. Janssen finds that if the exposure of his sun pictures is continued beyond the time for obtaining the best result, the negative image gradually becomes fainter and indistinct, then nearly disappears. By still further exposure a new picture comes into existence, a positive picture with the spots black, and the face of the sun bright, and the minor details shown as when viewed in a telescope. By further exposure after this a second neutral stage is reached.

He has further applied this principle to terrestrial photography, and, after exposures of from one to three hours, obtained direct positive pictures of landscapes. A picture of the Park of Meudon thus produced shows the sun as a white spot on a dark sky. From these positives he obtains other positives by similar protracted exposure, and negatives from negatives.

The interest of these discoveries is purely philosophical, no practical photographic advantages being, *at present*, obtainable.

GASES SINGING THEIR OWN DENSITIES.

THE accurate weighing of gases for the determination of their specific gravities is a delicate and difficult operation, in spite of all the devices that have been invented. A new and curious one has lately been proposed by Herr Goldschmidt, who extorts from the gas a vocal declaration of its own density, by simply filling a tube, first with air, and then with the gas or vapour to be tested, striking the tube when thus filled, and recording the note emitted.

Having obtained this record, and stated the number of vibrations due to each note, all that remains to be done, according to Herr Goldschmidt, is to divide the number of vibrations of the air by the number of the gas, and the square of this quotient expresses the specific gravity of the gas, that of air being unity.

I may add, that the number of vibrations due to all the notes of the diatonic and chromatic scales has already been determined and tabulated; for the determination of the intermediate tones, I presume that a siren, or instrument producing the same tone as the gas by successive impulses that can be counted, would be required.

ARSENICAL WALL PAPERS.

SINCE the printing of my February notes on the fattening of pigs, &c., by arsenic, I have met with the record of a striking example of its action on human beings. Some years ago Kopp, the celebrated German chemist, was engaged in producing those splendid coal-tar dyes which are obtained by boiling aniline with dry arsenic acid. He found that he gained 22 lbs. in ten weeks, without detriment to his general health, and that he lost this additional weight when he left off these researches. The same effect is observed on the workmen engaged in the works where rosaniline colours are made in wholesale quantities.

A well-known Birmingham firm, at whose works arsenical ores, &c., were smelted, and a great variety of very odorous gases poured forth (sulphuretted hydrogen being a speciality), was continually subject to actions for nuisance, on the ground that they were poisoning their neighbours. Their principal witness on these trials was a man living on the works (a watchman, if I remember rightly), who when he entered upon his duties there was a lean and hungry Cassius, but after some years of service became a Falstaff.

I have long held very heretical opinions on the subject of poisoning by arsenical wall-papers, even going so far as to believe that, if they have any effect at all, it is beneficial, on account of the powerful

disinfectant properties of very small quantities of arsenic and of arsenical vapours. I only refer, however, to smooth papers, and make a total exception in regard to green arsenical *flock* papers that are so thickly and so loosely loaded with the pigment that it may be brushed off as mechanical dust, and thus taken into the lungs in considerable quantities at once, and quite irregularly.

If it is fairly fixed on what is called "satin paper," it only comes away by very slow volatilization, the quantity being beneficently regulated according to the sanitary requirement for it, *i.e.* increasing with the warmth of the weather and consequent liability to infection.

As an example of the material upon which wall-paper panics are based, I quote the following, which "went the round" about two years ago. "Fifty samples of wall-paper recently examined were found to contain arsenic, either as arsenite or aceto-arsenite of copper. Some papers with green figures were found to be free from arsenic, while, as a rule, the higher-priced qualities contained the poison in the largest quantities. A room of the moderate dimensions of 16 feet square and 9 feet high would be covered, if these papers were used, with ornamental surfaces containing from 52 grains to more than 8 oz. of poisonous matter."

These statements of fact are probably correct, but the bugbear to be invoked by them is simply ridiculous. As nobody proposes to eat the wall-paper, it is a matter of indifference whether the quantity of poisonous matter *fixed* upon it amounts to 8 oz. or 8 lbs. The question is, How much is likely to come off in such wise as to be swallowed or inhaled by the inhabitants of the room?

We all know that green arsenical wall-papers continue green for many years, from which fact we may fairly infer that some of the arsenical pigment still remains. Let us suppose that at the end of seven years the paper on the room above described retains one-eighth of its original quantity, that the other 7 oz. have volatilized at an average rate of 1 oz. per annum, or $\frac{7}{8}$ of an ounce per day. As the cubic capacity of such a room is 2,254 feet, each foot of air would receive $\frac{1}{2254}$ part of an ounce per day, and, therefore, if the ventilation were only sufficient to renew the atmosphere of the room once in twenty-four hours, this would be its normal degree of saturation.

A full-grown man inhales about 100 cubic feet of air per 24 hours. Thus, even if he were living in such a room during the whole 24 hours of every day, he must be then imprisoned above 22½ years in order to inhale one ounce of arsenic, at least nine-tenths of which would be exhaled without absorption. This gives 225 years for the absorption of one ounce, or 450 years, if he lives in

the room 12 hours of each day. The Styrian peasant eats an ounce per annum, and believes that his health is improved thereby.

A quantity of carbolic acid or other hydrocarbon vapour that we may breathe with impunity is sufficient to destroy the germs of deadly infection. Arsenic vapour appears to act similarly. The absence of cholera, which has distinguished Birmingham and other brass-working towns, is popularly attributed to copper; and copper belts were made and sold as safeguards against cholera.

I think it far more probable that the immunity which these places have enjoyed is due to arsenic. Ordinary copper usually contains small quantities of arsenical impurity, and the other constituent of brass—zinc—a considerable quantity. The arsenic is so volatile that every brass foundry must emit some amount of arsenical vapour, and, besides this, gaseous arsenical compounds must be evolved in the “pickling” and some other operations connected with the brass workings.

If I lived in New Orleans or other focus of fever horrors, I would envelop myself to a certain extent in arsenical fumes, by covering my walls with highly charged arsenical papers, furnishing my rooms with arsenical upholstery, and carrying arseniuretted pocket-handkerchiefs; carefully observing the effect in order to stop short of the first warning symptoms of arsenical poisoning. This is easily done, as they gradually appear, and are not difficult to recognise. The only probable inconvenience would be the burden of additional fat—a burden which could be thrown off on leaving the pestiferous locality, as Kopp threw off his on ceasing to boil aniline over arsenic acid.

Having confessed so much of heresy, I will go one step further, and hereby suggest that fever hospitals should be supplied with regulated quantities of arsenical vapours. This idea may be experimentally tested without any risk to the health of either patients or attendants.

SELF-LUMINOUS RAILWAY CARRIAGES.

IN the early part of the past month (March) I rode from Willesden to Charing Cross in a London and North-Western Railway carriage, the sides and roof of which were painted with luminous paint. The experiment is a very interesting one, and so far successful; though the amount of light given out by the painted surfaces was less than the preliminary announcements of the invention would lead most persons to expect.

I may, however, venture to say that the light is sufficient for the practical purpose of illuminating the carriages during their *day-time*

passages through ordinary tunnels, though not sufficient to satisfy the demands of unreasonable people, whose delicate organisations and habits of superiority require perfection everywhere ; who must have a banquet when they dine, must be provided with full daylight at all times and places, and everything else to order. Such people have so much regard for themselves that they need no consideration from anybody else, and therefore may be left aside.

Although unable to read, I could see everybody and every other object in the carriage in a sort of ghostly, artificial moonlight of beautiful violet colour ; the same as is emitted from heated fluor spar, and to which the adjective "fluorescent" has been given.

It reminded me of the "Grotto Azzuro" at Capri, in the Bay of Naples, though but a faint and faded resemblance of the wondrous beauty of this cavern. In both cases the luminosity is due to a sort of second-hand light. The grotto is a chamber or cavity in a grand perpendicular sea cliff, with an opening so small that a boat can only enter from the tideless sea when there is no swell, and then the occupants of the boat must lie down while it passes through this little arch. Presently the boat is floating in a cavern with dome-shaped roof of considerable height and dimensions, and no other floor than the deep blue sea. The amount of light that enters by the entrance is but nominal, the general illumination of the cavern being due to the radiation from luminous water, the luminosity of which is the second-hand sunlight which it receives from outside. The effect is indescribably beautiful, the intense depth and brilliancy of the ultramarine glow so far exceeding anything else to which it may be compared.

The light in the carriage was the same in kind though very different in degree. Here, instead of the sea, it was the paint that had absorbed and transferred the outer sunlight. If we go on improving this luminous paint as other things have been improved after their first introduction, the passage through railway tunnels will become quite sensational, and æsthetically enjoyable.

As it is, some interesting observations may be made. By comparing the illumination of the carriage while in daylight with the fluorescence in the tunnels, I was able to recognise the reproduction of the original lights and shadows. Thus the thick edges of the window openings on the sides opposite to the sun fluoresced (excuse the coinage) so much more than the interior walls, that their violet luminosity was visible when entering a tunnel before that of the walls appeared, and when in full darkness the greater brightness of these edges suggested the idea of light actually shining in from the outside.

It was a variable day, but between two of the tunnels we had direct sunshine on one side of the carriage. When in the dark the patch of sunlight on that wall was faithfully reproduced by the greater intensity of the fluorescence.

I noticed just sufficient fading in the longer tunnels to invoke serious scepticism of the success of the proposed application to the illumination of carriages for night travelling, or to apartments that are to be used for some hours after the stimulant of daylight has departed. As used on the Mansion House line there was daylight revival between each tunnel, and no long continuance of darkness.

FLOWER-POT AND GREENHOUSE MANURE.

I HAVE an original idea to communicate to smokers and horticulturists, or more particularly to those who combine both of these aromatic recreations in one household.

Tobacco is about the most exhausting crop that can be raised. It carries away an extravagant quantity of fertilising incombustible salts from the land. This may be proved by simply smoking a cigar made of genuine tobacco and smoking or otherwise burning a similar weight of dried cabbage or other ordinary leaves. The quantity of ash left after complete combustion will be found far the greatest in the case of the tobacco leaf. This ash is the contribution of the soil; that which burns away in smoke and invisible gases is given to the growing plant by air and water.

Therefore, the ash of tobacco must be a good fertiliser, and should not be wasted. It contains 20 to 24 per cent. of potash and 3 to 5 per cent. of phosphoric acid. Even in Germany it would hardly pay the farmers to send round carts for collecting tobacco ash, but those who practise agriculture in flower-pots and greenhouses will find this ash a most convenient, cleanly, inoffensive, and profitable manure. I have made some experiments with it during the last two summers which indicate that its practical corresponds to its theoretical value, when lightly sprinkled as a top dressing on the surface of the mould.

Besides acting as a manure it has another valuable quality, especially when the ashes are from a pipe. The combustion of these is not so complete as those of cigars, and there remains with the ash a very perceptible quantity of nicotine, which seems to poison the germs of aphides and the larvæ of other creatures that repose in the soil during winter, and develop noxiously in summer time upon the roots, stems, leaves, and flowers.

PURE AIR FOR UNDERGROUND RAILWAYS.

MANY suggestions and a very few practical efforts have been made to improve the atmosphere of our underground railways by the use of smokeless and non-sulphurous coal or coke. It is well known to all who know London that thousands of locomotive Londoners shun the Metropolitan Railway and travel by omnibus, cab, tramcar, or roundabout routes on other lines in order to escape the underground atmosphere which they suppose to be injurious and know to be disagreeable.

Considering the magnitude of the interest thus involved I think the directors of this railway have made but a feeble display of energy and ability in combating this enemy of their prosperity. The long subterranean tunnelled tramways of many coal-pits nearly half a mile deep are better ventilated than the tunnelled railway between Edgware Road and King's Cross. Upcast towers could be built at less expense than upcast shafts can be sunk, and any competent mining engineer could show the directors how such a tower could be made to produce a current of air that should sweep down the stairways of the stations to the right of it and to the left of it, and effectively purify the atmosphere of the whole length of line between the two stations.

I have little doubt that such an engineer would agree with me in regarding the recent proposal to make a multitude of openings or perforations of the tunnels into the streets above as a very inefficient, not to say foolish, project, much ado to do a mere nothing, compared to what may be done with a single upcast chimney shaft between each station. It would not be very difficult to supply something like a gale of wind by such shafts, and very easy to keep up a gentle breeze of fresh air continually descending to the tunnel.

Another lesson might have long ago been learned from colliery experience. Machines have been invented and used for the purpose of superseding the miner's "pick" in cutting the coal. These machines are driven, not by coal burned underground, as in the locomotives of the Metropolitan and District Railways, but by the energy obtained by burning the coal above-ground and bottling up such energy in compressed air, carrying it down in this form and then releasing it as mechanical force at the place where such force is required.

This can be done quite as effectively in underground railways as in underground coal-winnings, and if it were done, the engine, instead

of contaminating the air of the tunnels, would help to ventilate them, by the amount of compressed air blown out at each stroke of the piston.

The compressed air engine, although much under present attention, is by no means a novelty. I find in the *Mechanic's Magazine* so far back as 1846 an account of "Parsey's Compressed Air Engine," and a controversy concerning its merits and defects.

There are some difficulties in working such engines which I need not discuss here, but I may mention one that is curious. When air is compressed, heat is evolved and given off; when it expands again to its original bulk it falls below its original temperature to a degree exactly corresponding to the amount of heat given out while it was compressed, and thus, in working such engines, the pipes conveying the expanded air are liable to be stopped by the freezing of condensed vapour.

Some experiments have recently been made at Nantes upon a tramway with a compressed air engine of improved construction. The chief feature is that the compressed air on its way to the piston passes through a reservoir of water and steam heated to about 320° Fahr. (confined in a strong vessel, of course). The air is thus raised to this temperature, and its expansive energy increased, enabling a given quantity of air to do more work. The specific heat of water is so much greater than of air that 1 lb. of water in raising 1 lb. of air one degree only loses one quarter of a degree; and, as 1 lb. of air at ordinary pressure has 814 times the bulk of 1 lb. of water, 3,256 cubic feet of air may be heated to any given thermometric amount, and only cool down one cubic foot of water to the same extent.

This engine has therefore two distinct reservoirs of energy, the compressed air and the superheated water, and nothing is blown off but air and vapour of water. There is a loss of power in transferring the energy of the stationary steam-engine to the compressed air locomotive; but taking into consideration the wear and tear of such locomotives as against the steam locomotive, the net loss is very small—too small to be set against the great advantage of maintaining uncontaminated air in the metropolitan tunnels.

AN ORIGINAL REMEDY FOR MOUNTAIN SICKNESS.

MR. WHYMPER, in his recent lecture on Chimborazo and Cotopaxi to the Society of Arts, described that dreaded enemy of the Alpine climber, "mountain sickness," and stated that he was not aware that anybody who had fought with the enemy "has

ever suggested the bare possibility of coming out victorious from such an encounter."

In the course of an ascent of Mont Blanc made many years ago I achieved such a victory in a very odd manner, and the incident may be worth recording, as it suggests a physiological problem and a possible means of performing journeys which this sickness renders quite impracticable to men of ordinary constitution.

It was late in the season, and we had great difficulty in crossing the "Bergschrund," or last crevass where the ice is parted from the pyramid of rock forming the summit. At last we found a practicable place, and on crossing it David Coutet, our chief guide, and then a very old man, performed a rolling somersault in the snow by way of jubilation. I followed his example, and improved upon it by standing for a while on my head and kicking my heels in the air, in further exultation. Up to this moment I had been very faint and sick, though not actually vomiting, but after this exploit I recovered and suffered the sickness no longer.

Was this a mere coincidence, or was the recovery connected with the inversion by any link of natural causation? To answer this question we must consider the nature of the sickness. It is doubtless produced by the rarity of the air, but how? We know that when breathing such attenuated air the blood is insufficiently supplied with oxygen, and we may justly infer that the brain is thereby deprived of the nourishment and stimulus demanded for its normal vigorous action. This mountain sickness is evidently not merely a disturbance of the stomach, but an affection of the brain producing a general lowering of vitality. The languid funereal crawl of brawny vigorous men is quite ludicrous. Talking, even thinking, demands a fatiguing effort. The sense of fainting and sickness is similar to that which is produced by loss of blood, or the contemplation of some ghastly horror.

The ordinary treatment of fainting is to lay the patient down, in order that as much blood as possible may reach the brain, or even to keep the head below the general level of the body. Thus, without any theory, or any intention of relieving the sickness, I applied the ordinary remedy for ordinary fainting, but in an exaggerated form.

I therefore conclude that the bodily inversion was the *vera causa* of the altered sensations, and recommend Mr. Whymper, when he "does" Mount Everest, to try this as well as chlorate of potash. A little preliminary practice on a soft pillow will enable him to turn up at a moment's notice, and as often as desirable, on the soft snow, which is especially favourable for the exploit. Further practice on the "Catherine wheel" mode of progression familiar to street Arabs will qualify him to continuously apply this remed

without breaking the journey by the usual gasping halts, that render all upward progression at great altitudes so very slow and tedious.

IRON FLOATING ON IRON.

FOR more than a century the ironfounders have succeeded in puzzling the philosophers by showing them an experiment quite familiar in the foundry, but questioned and even denied in the lecture-room and learned society.

This experiment is the throwing of a lump of cold iron into a pot of melted iron. The solid iron, instead of sinking, as it should if it behaved according to laboratory determinations of its specific gravity, contradicts them flatly by rising to the surface and floating upon the melted metal of lower specific gravity than itself. An account of the controversies and attempts at explanation that have been connected with this experiment would fill a whole number of this Magazine, but one has been lately offered which really seems to solve the mystery.

Professor Chandler Roberts and Mr. Wrightson have invented an instrument for measuring the specific gravity of heated metals, and find that, although cold iron, or completely solidified iron, is unquestionably more dense than melted iron, it becomes abnormally expanded just before melting, or at the temperature at which it assumes that plastic condition which renders welding possible ; and thus it floats when it reaches this temperature.

Having repeated the popular foundry experiment, I am prepared to support this theory. I noticed that in every case the metal sank, then presently it rose and floated, but I attributed the sinking to the force of projection. Now the idea is suggested, I remember that the uprising was slower than it should have been as a mere result of immediate buoyancy, and that the time which elapsed was sufficient for the heating of the lump to the temperature named by Messrs. Roberts and Wrightson.

Besides this, there is a peculiar porosity in iron at this temperature—so great, that under the hammer it appears like a sponge ; and I suspect that a frothing then occurs due to the loosening of some of the gases which are occluded or solidified within the cooler metal. If this is the case, the increase of volume or porosity due to this increase of gas explains the special diminution of specific gravity at this temperature. Graham extracted hydrogen and other gases that were occluded or solidified within various samples of iron by merely heating them, and then pumping out the gases from the pores which their evolution had created.

W. MATTIEU WILLIAMS.

TABLE TALK.

THE book of the month, which everybody is reading and talking about, is undoubtedly Mr. Carlyle's *Reminiscences*, edited by Mr. Froude. The opening division of the first volume, written nearly half a century ago, on receiving the news of his father's death, is perhaps the most beautiful of all. James Carlyle was a sturdy, thrifty Scottish mason, of strict religious walk, but of natural shrewdness and wit withal ; a man of much rustic strength of character, though with little or no liberal education, and a mental and physical horizon bounded by some twenty miles of his native Dumfriesshire.

JAMES Carlyle died in 1832, when his son, who was then absent in London seeking a publisher for *Sartor Resartus*, had already given rich promise of future greatness. Carlyle's mother survived until the Christmas of 1853. He speaks of both parents in terms of the deepest tenderness, affection, and reverence.

THE memorials of Edward Irving, which close the first volume, are of intense and painful interest. Carlyle and Irving first became acquainted at Edinburgh in the Christmas season of 1815, and shortly afterwards, in the summer of 1816, their acquaintance ripened into intimacy and friendship on Carlyle's appointment to a "classical and mathematical mastership" at Kirkcaldy, where Irving was already settled. It was through Irving that Carlyle was first introduced to his future wife, Miss Jane Welsh, daughter of Dr. John Welsh of Haddington, a descendant of John Knox.

They were married in 1826 ; she being in her twenty-fifth and Carlyle in his thirty-first year ; and from that time forward till her sudden death in April 1866, she was his good angel—"in sickness and in health, for richer for poorer, for better for worse," aiding and furthering him in all he did and suffered. Of the noble self-sacrifice she made, of her untiring devotion, and tender ministrations, there is testimony ample and touching enough in Carlyle's *Reminiscences* of her, which fill a large part of the second volume.

Written in the anguish of his first poignant sorrow for her loss, they are often quite heartrending, and appear almost too sacred for publication. The Recollections of Jeffrey—written in a calmer mood at Mentone, after the earliest bitterness had a little subsided—are more pleasant to read.

THE incidental notices of some of Carlyle's distinguished contemporaries which are scattered through the two volumes—of Wordsworth, Southey, Charles Lamb, Coleridge, De Quincey, Basil Montagu, Leigh Hunt, Stuart Mill, and others—are essentially harsh, one-sided, and jaundiced, and it is probable that Mr. Froude would have best consulted Carlyle's fame by suppressing much of them, as he had ample discretionary power to do.

THE slovenly haste with which the book has been passed through the press cannot be too highly deprecated. It is indeed the most singular specimen of "editing" which I have seen for many a long day. If one thing more than another distinguished the late Mr. Carlyle in his published writings, it was his scrupulous and even painful accuracy in regard to names and dates. The task which the editor of his *Reminiscences* had to perform was not a very difficult or laborious one—it was one, in fact, which an intelligent and skilful printers' reader might have accomplished, with bare, or at best with barren, thanks for his pains. I do not believe that Mr. Carlyle wrote (and I am quite sure that he would never have printed) "Basil Montague," "Crabbe Robinson," "Brian W. Procter," "Sir Antony Carlisle," "Sir James Grahame," "Mrs. Jamieson," which are the disguises under which the names of Basil Montagu, Crabb Robinson, Bryan W. Procter, Sir Anthony Carlisle, Sir James Graham, and Mrs. Jameson here figure. If by a slip of the pen, or a lapse of memory, he wrote of "autumn of 1845, when John Sterling died" (vol. ii. p. 224), the error might have been silently corrected by substitution of the right date "autumn of 1844," which no one, certainly, knew better than the author of *Sterling's Life*. In alluding to the death of his sister Margaret, Carlyle mentions (vol. i. p. 305) that it took place in the shortest night (*i.e.* the night following the longest day, June 21) of 1830. Mr. Froude, in a footnote on p. 12 of the same volume, gives 1831 as the date of this sister's death. In his *Reminiscences* of Southey, Carlyle speaks of De Quincey's papers on the Lake Poets (vol. ii. p. 316) as appearing in "*Blackwood's Magazine*" (obviously a slip of the pen or lapse of memory); it should be "*Tait's Magazine*." This error the editor, if he

did not correct it in the text, should at least have rectified in a footnote. Nor can I conceive it possible that so accurate (not to say profound) a German scholar as Carlyle could have written of "*Frederick Wilhelm's Ultimatum*" (vol. ii. p. 50). I should also like to ask, what is the meaning of "a pocketful of *odd*" (vol. ii. p. 187); and what Foote had to do with "Jeremy Diddler" (vol. i. p. 224), or "Jeremy Diddler" with the famous, or rather infamous, Earl of Sandwich, the friend and afterwards the betrayer of John Wilkes? I always thought that "Jemmy Twitcher" was the cognomen applied to him by certain contemporary playgoers at a performance of Gay's *Beggars' Opera*. ("That Jemmy Twitcher should peach me, I own surprised me.")

THE volumes are not furnished with an index, though, from the great variety of names, places, books, &c., mentioned, they stand sorely in need of one; and considering how emphatically Carlyle always inculcated and insisted on the necessity of an index, and what excellent indexes he invariably provided for his own books, this seems an unpardonable omission.

IN a recent number of the *Fall Mall Gazette* the question is asked, "Who can supply a reasonable explanation of the fact that the science of bibliography attracts numerous devotees in France, and only finds a stray worshipper in this country?" The explanation of this fact is easy, and is less discomfiting to our national pride than might be expected. French bibliographical works are undertaken because Englishmen, Germans, Russians, and, in fact, all European peoples read French. When a work like the *Manuel du Libraire* of Brunet or the *Supercheries Littéraires dévoilées* of Quérard appears in Paris, England subscribes largely. In the case of an English work of the same class, there are not half a dozen copies sold in France. The trade in London in French books is so large that there are half a dozen wholesale houses occupied with it. In Paris the sale of English books is limited to the Tauchnitz Series, and a few pirated reprints. So occupied with their own literature are Frenchmen, that it is impossible to awaken interest in any foreign writers, except the greatest men, concerning whom it is shameful to be ignorant. French writers on bibliography do not underrate the works of their English rivals. One of the most eminent of their number declares, *à propos* of the works of Dibdin, "qu'on ne peut faire de pareilles entreprises qu'en Angleterre."

IF a statue worthy of Carlyle can be found, I do not see why we need let the recorded utterances of the Sage of Chelsea prevent us from erecting it on the proposed site on the Chelsea Embankment. There is no absolute need that it should be "an amorphous brazen sooterkin bred of prurient heat and darkness," to use his own words concerning a statue. If we have to concede that our utmost efforts in this line of art result inevitably in "sad sculptural solecisms," it is time we improved, and in this attempt we shall not succeed if we determine to erect no more statues. The argument that statues in England have been reserved for monarchs and state flunkies is valueless, inasmuch as, if the statement is true, it is time we brought about a different condition of affairs. We have no monument, it may be said, to Shakespeare. This is true. In the case of a man so great as this, modesty is pardonable. So much the world's possession has he become, that we scarcely like to assert too strongly our right to him, and we feel as if the monument to him, supposing such should ever be erected, should be raised at the world's charge, and should be open to the world's competition. That he needs not for his

honoured bones

The labour of an age in piled stones,

we are ready to admit with Milton. Gratitude may surely at times go in advance of a man's requirements. Were it otherwise, all tributes to the dead would be wasted. Meanwhile, as regards Carlyle, the fact that he scowled at bad statues, among other things good, bad, and indifferent at which he scowled, supplies no reason why we should not offer him a good one if we can find it.

SINCE writing about book-worms I have come across Mr. Blades's useful little volume "The Enemies of Books," with which I was previously unfamiliar. In this he supplies some curious information concerning these terrible foes of the scholar and the collector. He assumes that the caterpillars and grubs which eat books are of various kinds, and states that some are "a kind of death-watch with a hard outer skin, and are dark brown;" while another sort have "white bodies with brown spots on their heads." A third sort, I can assure him, have white bodies and hard black heads. A worm of this kind, judging from a story about Dr. Bandinel, which he tells, seems to have been seen by Mr. Blades. I will not give a list of the formidable names—Anobium, *Æcophora*, &c.—which he supplies. The rather comfortable assumption that a worm will not eat modern paper I must controvert. Some kinds of paper, at least, they will

cat, witness my Hunterian Club publications, concerning which I made previous outcry. It is possible that the "China clay, the bleaches, the plaster of Paris, the sulphate of barytes," and other adulterants in occasional use, may drive them from some paper, though not from that in which no such element is present. At any rate, Mr. Blades echoes my wish—or rather, as he was first afield, I have echoed his wish—that "some patient entomologist should, *while there is a chance*"—sanguine Mr. Blades!—take upon himself to study the habits of the creature, as Sir John Lubbock has those of the ant. In this case, however, the old advice, first catch your grub, has special significance. A weasel asleep, or a dead donkey, or any other creature ordinarily supposed to be difficult to find, is a commonplace object beside a living book-worm.

THE sale by auction of an original portrait of Milton deserves to be chronicled in these pages. Added interest was communicated to the work in question from the fact that it had at one time belonged to Charles Lamb. In 1815 Lamb writes to Wordsworth, saying, "Let me in this place, for I have writ you several letters naming it, mention that my brother, who is a picture-collector, has picked up an undoubtable picture of Milton. He gave a few shillings for it, and could get no history with it but that some old lady had had it for a great many years. Its age is ascertainable from the state of the canvas, and you need only see it to be sure that it is the original of the heads in the Tonson editions with which we are all so well familiar." In a following letter he returns to the picture stating that it is "very finely painted; that it might have been done by a hand next to Vandyke's. It is the genuine Milton, and an object of quiet gaze for the half-hour at a time. Yet, though I am confident there is no better one of him, the face does not quite answer to Milton. There is a tinge of *petit* (or *petite*, how do you spell it?) querulousness about it; yet, hang it! now I remember there is not; it is calm, melancholy, and poetical." From Lamb, the picture came into the collection out of which it has now been sold. For the few shillings spent by John Lamb there has now been expended three hundred and fifty-five pounds. The present possessor is Mr. Quaritch.

A picture like this ought at once to have been secured for the National Portrait Gallery. There is but too much reason to fear that things have been left too long, and that a portrait the genuineness of which can scarcely be doubted by any one who sees it, and which is, moreover, the best we possess, will, like many other national treasures, find its way to America.

LOOKING through Milton to see if it were possible to find any allusion to this picture, I came across curious proof how slovenly are index-makers. In the index to Milton's Works, edition the ninth, London, 1790, the word "painted" is said to occur once, viz. *Paradise Lost*, viii. 434. It is not to be found there or anywhere in the eighth book. This error—it should be vii. 434—is copied into Cleveland's *Concordance to Milton*, 1867. As an instance of carelessness in index-making, I may mention the six-volume edition of *Lamb* by Mr. Percy Fitzgerald, 1876. This is supposed to be alphabetical, yet these five words are given in the following order—Married, Milton, Munden, Montagu, Margate. The name of Hylas is ingeniously brought under the letter M.—M. Hylas ; and Munden appears in the list in three different places.

I SHALL neither accept nor contradict the statements concerning that admirable piece of extravagance the "*Heptalogia, or The Seven against Sense*," which have found their way into print. That critics reading the marvellous imitation of Mr. Swinburne's method should burst out into the ejaculation, "*Aut Swinburne aut Diabolus*," does not surprise me. What does surprise me is that so long time should have passed before the ejaculation was heard. It is worth while, however, to point out, leaving out all question of authorship, that the "*Sonnet for a Picture*" is of course a parody of the style of Mr. Dante Rossetti ; that the Laureate's poem, "*The Higher Pantheism*," supplied the origin of "*The Higher Pantheism in a Nutshell*"; that James Lee's *Wife*, one of Mr. Browning's *Dramatis Personæ*, suggests "*John Jones*"; and that "*The Person of the House*" follows Mr. Coventry Patmore's "*Angel in the House*." "*Nephelidia*," otherwise "*Cloudinesses*," seems designed to parody some of the choruses in "*Erechtheus*." Against whom "*The Poet and the Woodlouse*" is directed I am unable, having no special sources of information, to say with certainty.

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THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER XIII.

ELECTIVE AFFINITIES.

THERE was silence between the two girls for a moment or two after Melissa had made her revelation. The dusk of evening was gathering ; the air was soft ; Geraldine's windows were open ; the footfall of passengers echoed along the street ; and the sound of the barrel-organ, which had touched Melissa's sensibility not long before, was still heard in the room, "faint from farther distance borne." Geraldine could hear distinctly the beating of Melissa's heart, as she sat close to the troubled girl. She could also hear the faint ticking of the pretty little clock that stood on the chimney-piece ; and an odd whimsical fancy came into her head that the little pit-pat of the pendulum ought to represent the beating of the absent lover's heart, keeping time and tune to the throbs of Melissa's enamoured bosom. Geraldine assumed that it was an ordinary love affair, but that perhaps the youth required some little direct encouragement from the maiden. She was conscious even then, and she remembered it well afterwards, of a certain sense of relief in the knowledge that it was not Clement Hope on whom Melissa's uncontrollable affections were fixed. "She would never do for him," Geraldine thought ; "she hasn't soul enough ; she's too petulant ; she couldn't make him happy."

Geraldine was sorry for Melissa and angry with her too. But she was not at first much alarmed by Melissa's disclosure. It did not occur to her to think who the person could be to whom Melissa had

made her confession of love, and she was more inclined to be amused than shocked.

"Is this any one," she asked, "whom your father would like?"

"I don't know," said Melissa coldly. "I have not consulted my father."

"But, won't your father expect to be consulted?"

"I don't think my father would care to be consulted about his daughter making a fool of herself and writing a silly letter to a man."

"But the man will answer the letter, won't he? He must speak to your father or to you."

"He won't answer my letter," Melissa composedly answered, "because he doesn't know my name."

"Oh—then you didn't sign it? You didn't write in your own name?"

"No," Melissa answered in a dismal tone, "I did not get so far as that—but I dare say I shall some day."

"Well, you are a very dreadful little girl, Melissa, and that is the truth of it. I hope you won't get so far as you say. I hope you will be content with your anonymous outpouring of homage. But I should like to know who the man is, if I might—if you don't mind telling me; and I think, as you have trusted me so far, you might trust me a little farther perhaps."

"What good will it do you to know?"

"Well—only this, that I think I could better judge whether this humour is likely to last with you or not, and whether *he* is likely to find out his mysterious admirer, and whether it would matter if he did. Is he a very young man?"

"No."

"He is not a very old man, I suppose?"

"No; he is not old, and he is not young, and he might be any age. I wish I had never seen him. No, I don't. I'd rather not have lived than not see him."

Geraldine really began to think from the girl's manner that things were looking serious. "Have I ever seen him?" she asked.

"You go on," said Melissa, "as if this was a game of *Twenty Questions*; and it isn't. Yes—you have seen him; and he has seen you; and I wish he had not."

"Why do you wish that?" asked Geraldine, astonished.

"*'Demetrius loves your fair,'*" said Melissa, "*'oh happy fair!'*" With all her ignorance and her indifference to reading, Melissa, as we have already seen, had a little knack of picking up a Shakespearian quotation and employing it prettily enough.

"This is mysterious," Geraldine said. "Well, if I had any influence over him, I am sure I would make him over to you with all my heart. But I cannot imagine who he is ; we know so very few men—I mean, you and I know so very few together. I know it isn't Mr. Hope, and I know it isn't Mr. Fanshawe."

"Stuff !" said Melissa contemptuously. "Think of Mr. Fanshawe !"

"Well, I do think of Mr. Fanshawe ; I think very kindly of him, but I know it is not he—I suppose it isn't Captain Marion ?"

"Not likely !" said Melissa.

"Then, I give him up," said Geraldine, "and there's an end of it ; for I have gone through all our list of acquaintances."

Melissa's face bore such an expression of surprise, and something like contempt, that a light seemed to come from her into Geraldine's mind.

"Melissa," she said, "you don't mean Mr. Montana ?"

"Don't I, though ?" Melissa replied. "But I just do. I am in love with him ; madly in love with him, if you like—there ! I have told you all. Laugh at me if you please, or scold me, or pity me ; it is true all the same ; I am glad I have told you ; I must have told somebody, or I should have screamed it out in the night. I have written him love-letters—grovelled before him. Oh ! what will he think of me if ever he finds out ?"

"But he must never find it out," said Geraldine. She had turned pale ; the thing was serious.

"Oh, he will find it out," said Melissa. "Some day I shall betray myself ; I cannot help it. I wish I had been a better girl. I wish I had learnt to think more of what people say—and all that ! I wish I had cared for saying prayers—and—and that sort of thing."

Poor Melissa did not mean to speak irreverently ; but her turn of expression was touching in the very simplicity of its irreverence. She could think of no other words at the time.

"Prayers and that sort of thing !" said Geraldine.

"Yes, anything you like. I suppose you can pray ? My mother does not care about prayers, and that sort of thing. She never did. My father is too busy. I suppose men don't pray. Anyhow, I wish I were like another girl. Oh, how I wish I were like you, for one reason above all others."

"I don't know any reason," said Geraldine. "I haven't a father, and I haven't a home."

"No," said Melissa, standing up and clenching her little hands ; "you have not. But Mr. Montana cares about you a hundred

thousand times more than he ever did or will care about me—that I know.”

Geraldine was really pained by these wild words. She was deeply sorry for Melissa ; but now there began to mingle with her concern for Melissa a certain vague undefinable sense of alarm about herself. Mr. Montana's manner had from the first been unwelcome to her ; and if others saw it as well as she, if others had the same impression forced upon them, if a girl like Melissa could see it, how distressing it must be to be brought continually into a sort of companionship with Montana? Always there had seemed something ominous to Geraldine in her relationship with him. She was not afraid of him as others were, or impressed by him and his strange manners and his singular beauty. But there was something uncanny in the manner in which his shadow seemed always to be thrown across her path. Her first thought on hearing Melissa's words was a longing to go away somewhere, anywhere, out of Montana's range ; and then came back to her the more reasonable thought that she had better stay where she was and try to help Melissa out of her difficulty, and if possible help her to cure herself of her foolish passion. She went to work resolutely to reason with the girl, but did not seem to make much impression.

“ Let me alone,” said Melissa at last ; “ advising is never any good with me, nor arguing, nor scolding. It was always my way, the more I was pressed not to do a thing, the more I wanted to do it. You can't keep me back, Geraldine, from doing anything that comes into my mind. I could not keep myself back. I will try to keep out of this thing as long as I can, but some day I shall tell him all this one way or another. I shall either write it or I shall speak it. I shall not be able to keep it in ; and I suppose he will rebuke me and preach me a sermon and tell my father all about it, and Captain Marion will shake his head over me and think what a bad girl I am, and what good girls his daughters are—although I don't know that, either ; I fancy one of them, at all events, is nearly as far gone as I am myself. But anyhow you will all be ashamed of me, and I shall be ashamed of myself. But I am in love with him all the same, and he must come to know it, and that's all about it.”

There was not much use in saying more on the matter just then. Melissa's words about Montana, and her hints about some one else as well as herself, made Geraldine unwilling to mention his name again.

“ Now I hope I have shocked you enough for once,” Melissa said coldly, “ and I'll go. I had better get the redness out of my eyes, hadn't I, before dinner? You can tell on me, Geraldine, if you

like ; you can tell my father, or Captain Marion, or Sydney, or anybody. I should fancy it would be the duty of a good girl to tell such a thing to a wicked girl's parents, but I am not a great authority on the subject. Do as you like ; I don't much care."

"You dreadful little thing ! you know I'll not betray you," Geraldine answered. "I don't know that I am not doing wrong ; I don't know that I ought not to tell your father ; but I won't. You trusted me, and I'll keep to my trust. But oh, my poor child, how I wish you would speak to your father. Oh, when I had a father——"

"Yes," Melissa said, "I dare say!" She was going away scornfully ; but something in Geraldine's expression seemed to strike her. She turned back and took Geraldine's hand gently, and asked in a low tone, "Will you kiss me, Geraldine?"

Geraldine took the little palpitating girl in her arms and kissed her.

Montana was a constant visitor at Captain Marion's house. He never missed a day. He came and went when he pleased. Sometimes, but not often, he dined and met people there ; his habit, however, was to come in early in the day and before any ordinary visitor was likely to arrive. He was a good deal with Captain Marion, who still remained under the impression that he was getting to know all about Montana's schemes. He hardly ever failed to look into the drawing-room and see some of the young ladies.

With all Captain Marion's admiration and reverence for his friend and possible leader, he could not help feeling that Montana's visits had strangely changed the atmosphere of the house. He was always glad to see Montana ; and the singular fascination with which Montana had impressed him from the first in no wise diminished, but rather increased, from the frequency of their intercourse. But Captain Marion could have wished sometimes that the women were out of the way. Montana's coming and going acted strangely upon all of them. Katherine admired him in the most open way, flattered him, hung upon his utterances—followed him about, one might say, almost like some faithful animal clinging to his master's heels. Captain Marion did not like this. It puzzled him ; it sometimes irritated him. His soft, affectionate, unsuspecting ways did not allow him to think that Katherine was trying to get up a flirtation with the prophet and leader, and indeed Montana's position of prophet and leader made it easy for women to offer any adulation to him without suggestion of levity. Yet Marion did not like to see his daughter thus openly devoted to Montana. He thought there was something at least unladylike, not to say unwomanly, about it.

He wondered Trescoe did not notice it ; was sometimes glad he did not notice it, and sometimes thought it rather weak and silly that Trescoe did not see it and talk to her seriously and put a stop to it. On the other hand, the coming of Montana either sent Miss Rowan out of the room or condemned her to absolute silence. She clearly disliked and distrusted Montana as much as Captain Marion's younger daughter believed in him and adored him. This, too, made Captain Marion uncomfortable. He was very much attached to Miss Rowan. He was always happy to have her near him. He would have wished her to like everything he liked, to love all that he loved, to have the same tastes, inclinations, and tendencies as he had. It distressed him to find that she shrank from Montana so openly, and to all appearance disliked him so much. He wondered that Montana was not repelled by it. He was afraid sometimes that Miss Rowan's manners might lead Montana to come less often.

Again and again Marion was on the point of remonstrating with both young women—with Geraldine for her repelling manner to Montana, and with Mrs. Trescoe for her too open admiration. Then, he could not but observe with pain the strange ways of Melissa Aquitaine, about whom he felt an almost greater sense of responsibility than if she had actually been his daughter. Her whole nature seemed changed since Montana came above the horizon of their little world. She crept into corners when he was there, and scarcely spoke, but started or grew pale, or looked angry or alarmed according as others spoke and he spoke to them. She who had been such an audacious, outspoken, pert little chatterbox was sometimes changed into a melancholy, bitter, broken-down creature. How Montana failed to notice that something was amiss with the little girl whenever he came into the room Captain Marion failed to understand. Marion himself was anything but an observant man. His sympathies and not his observation guided him in this instance. When he cared about anybody, man or woman, he was sure to observe that person's movements closely and kindly, and thus it was that he came to notice the strange ways of his old friend's only daughter. But Montana, who had keen observation when he chose, had no such sympathies to guide him, and he hardly ever noticed the little girl whose odd ways disturbed Captain Marion. To make matters worse, Katherine was always saying spiteful little things to her father about Melissa, and suggesting that Melissa was madly in love with Montana and was making an exhibition of herself.

One day Marion lost patience a little.

"I tell you what, Katherine," he said, "I don't think little

Melissa is the only woman in this house who sometimes makes an exhibition of herself. I think if I were you I wouldn't show such awful admiration for Montana."

Katherine got red and looked angry, but concealed her anger.

"Why, papa," she said, "you are awfully fond of him—you adore him. I like to do whatever you do."

Marion smiled in spite of himself at the absurdity of the answer.

"That's all very well, Katherine," he said, "for me ; but for a young woman to go on showing such admiration is quite another thing. I wonder how Trescoe likes it."

"But Frank doesn't care a bit," said Katherine. "He knows it's all right."

"Yes, yes, of course, we all know it's all right," said Marion ; "but, my dear, don't you think it would be better to be a little more reserved? I don't wonder at your admiring Montana. He is a man that every one must admire—at least, almost every one," he hastily added, for he remembered how Miss Rowan did not seem quite to admire him. "But then, you know, I think it would be more ladylike to be a little more reserved. After all, Montana is not an old man. He is still what would be called young, and he looks younger than he really is, and he is very handsome."

"But then, you know, papa," said Katherine, "one does not think of him as one does of other men ; nobody thinks of flirting with him. I am sure I don't ; I am sure I should not have the courage. One might as soon think of flirting with John of Leyden or with some saint."

Marion said no more, but he observed that the adulation went on as much as ever, and that it did not seem to be just the sort of adulation which a woman offers to a John of Leyden or to a saint. However, he was sure there was nothing amiss with Katherine, he said to himself, and Montana was the safest of men. Montana never for a moment put on the manner of one who flirts with women, or is conscious that they are trying to flirt with him. His manner was just the same to men and women whom he liked. Evidently, Marion thought, he did not like Miss Rowan. He seldom spoke to her, although Marion noticed that he often fixed his eyes on her.

Another little trouble to sweet-tempered Captain Marion was the growing melancholy of his daughter Sydney. Young Fanshawe came very often, and was intensely devoted to Miss Rowan. He was very friendly with Sydney, as he was with Melissa, but he showed an undisguised devotion to Geraldine. She talked to

him and went about with him as freely almost as if he had been her brother. It sometimes happened that poor Sydney was thrown a little into the shade—was left, as it were, in a corner by herself. Once or twice, when Clement Hope called after their walk to the Tower, she caught herself wishing that he would come very often, and thinking what a very handsome young man he was, and how like a picture, and how sweet and tender his ways were, and how very delicious it would be if he were only to be a little friendly and companionlike with her, and talk with her in a recess of the room as somebody was always talking with Geraldine. But then, again, would come the reflection into Sydney's mind that most assuredly if Clement came often he would devote himself either to Melissa or to Geraldine, and that she would be left out in the cold just the same as before. Captain Marion could not help seeing that Sydney was depressed and dull sometimes, and that something was wrong with her. He often thought he noticed, with peculiar pain, that there was a certain coldness in her manner towards himself, and that her affection was much less demonstrative than it had ever been, although at no time had she the demonstrative ways of Katherine.

This puzzled as well as pained him. None of the talk had reached his ears which had sometimes come to those of his daughter. He did not remember that he was still a clever, handsome, attractive man, little past the prime of life as yet, with plenty of money, and that in his house, apparently on the most familiar and affectionate terms with him, and more so with him than with any other of his family, was a young, bright, and handsome girl who was believed to be poor, and who had all the world before her to make a way of living for herself. It never occurred to Captain Marion that a good many people were likely enough to assume, as Mrs. Aquitaine had long since assumed, that Sydney Marion would soon have a young stepmother.

CHAPTER XIV.

A CRISIS.

THE wrecks come to the shore. The shore is not expected to go out and meet the wrecks. Sometimes, badly off as the wrecks already are, it might be better for them if they did not come to the shore. The shore only batters them a little more than the sea

had done. We do not know whether Montana could be fairly likened to a shore in the good sense or the bad, but certainly a good many wrecks came to him during his London visit. Wrecks of projects, wrecks of ideas, of hopes, of philanthropic schemes, of conspiracies—wrecks of men and of women constantly drifted to him. There was hardly a broken-down inventor, projector, or dreamer in London who did not seek him out and endeavour to get a new charter of hope from his helping hand. Men who believed in nothing sought him out in order that they might be confirmed in their unbelief. The visionaries who had plans for bringing all the world to instant peace, the men who had discovered the means whereby war might be brought to an end through the virtue of some invention so destructive that whole armies and fleets disappeared at a touch, the men who had a scheme for the foundation of one universal religion and brotherhood of nations—all these came to him.

Montana employed several secretaries, and they were kept busy all day long in opening and answering his letters. He made it a point of principle or of honour to answer every letter if he could. Not a few of his correspondents were evidently writers whom the world called mad men or mad women, but still, when a letter was not anonymous, he endeavoured to give it some sort of reply. Happily for him, a considerable percentage of his writers were anonymous, and so much time at least was saved to him and to his staff. He continued to receive pretty regularly the effusions in the handwriting which had sent a cold shiver through the veins of Clement Hope. He hardly read them. He glanced at them just closely enough to see that they were of the same kind, breathing the same hysterical passion of girlish adoration and love. They had absolutely no effect upon Montana. The invitations to assist a new discoverer of perpetual motion had quite as much interest for him.

Not all those who sought Montana were wrecks. Stately galleons floating safely to port, tall ammirals proud in their strength, gilded galleys with silken sails—these sought him out too. It became a matter of competition amongst the aristocratic to secure him for a dinner, and even to get his presence for a few minutes at an evening party was an object to be intrigued for long in advance. He only went amongst those who had shown some interest in his particular movement. No persuasion, no entreaty, could induce him to accept what may be called a general or miscellaneous invitation. He never consented to dine out or go out anywhere for the mere sake of meeting fashionable people and distinguished strangers.

Now, we have already mentioned the invitation pressed upon him

by the Duke of Magdiel in the name of the Duchess, which Montana had coldly and almost contemptuously declined. The refusal naturally only made the Duchess still more eager to have him at her house, or even to meet him at some other house. It was impossible for her ever to unbend so far as to make the attempt again in her own name, even if there had been the least chance of success. She was therefore beginning quietly to give up the idea, and resigning herself to the conviction that after all these Americans have no manners. But her daughter, Lady Vanessa Barnes, was not to be so easily disconcerted. She had married a man whom her mother did not like, and who was not of aristocratic rank, but who made up for his defects by having an immense amount of money, and by looking up to his young wife as the head of his house and the star of his existence.

Lady Vanessa Barnes held herself to be in a sort of rivalry to the Duchess as regarded social distinction, and had never forgiven her mother the coldness which the Duchess at one time showed to her future son-in-law. Lady Vanessa Barnes hardly ever made any movement in social life without having in the recesses of her mind some thought of the opportunity it gave her of showing how great a man her husband was, and how she could bring all the world to his feet as well as to her own. The moment she heard of the rebuff given to the Duchess by Montana, she determined that Montana must appear in her drawing-room, and be seen by the Duchess there. She was very clever, very beautiful, very ignorant, full of audacity and self-complacency, and with about as much reverence in her nature as a schoolboy has. She had heard a great deal about Montana, but to her he was for a long time only a funny sort of man who had odd notions, and about whom people used to tire her with their ravings. But he became a very important personage indeed when there was a chance of bringing him to her drawing-room and showing him off in triumph to her mother the Duchess.

Lady Vanessa quickly went to work. She besought all her male friends who knew anything of Montana to try to get him to dine at her house, or even to come to one of her parties. All her plans proved failures. "I will have him, all the same," she said to herself; and the more the difficulties seemed to grow, the greater grew her determination to overcome them.

She had not many accomplishments, but she was a remarkably good amateur actress. She had so much courage that she could always make the fullest use of any gift she possessed, and she had the audacious purity of a savage girl. She once played the part of a

saucy page at some private theatricals in her own house, and when the play was over she mingled with the company for the rest of the evening, making fearless and full display of her beautiful legs. Lady Vanessa went to hear Montana speak, and formed her opinion of him in a moment.

"The man has no more head than a pin," said the audacious lady. "I don't see anything in him. He is very handsome, but I don't care for beauty-men. I think I can manage *him*."

It was not difficult for any one interested in Montana's movements to find out where he passed his days and his evenings, with whom he had luncheon, and with whom he dined. He was dining one day with Captain Marion and his household, and the ladies had left the room and the men were alone, when a servant brought a message that a person, who would give no name, wished particularly to speak a few words with Mr. Montana.

Montana never refused to obey a summons of this kind. It suited his purpose to show that he was ready to receive an appeal from any one, however unknown, and that he placed himself and his services at the disposal of all humanity. He did not ask who the person was, or even whether it was a man or a woman. He instantly rose, as a soldier rises at the word of command, and left the dining-room.

"Montana hardly ever gets a moment to himself," said Captain Marion, with a certain air of vexation, for one of his guests had just succeeded in drawing the leader and prophet into a conversation, animated on Montana's part to an unusual extent.

"Can't think how he manages to see so many people, and to do so much," one of the guests remarked. "Does he see every one that asks for him? They say he does."

"I really think he does," said Marion. "I never heard of his refusing to see anybody. If the crossing-sweeper from over the way wanted to have a discourse on the immortality of the soul with him, Montana would leave his dearest friend and go and talk with the new inquirer."

Meanwhile Montana was shown into the little library, and there he found a tall young woman, veiled, according to the immemorial custom of mysterious heroines.

"You don't know me, Mr. Montana," the lady began, without giving him time for thought; "but I know you; every one knows you. I have come to-night to claim a service at your hands. I ask you to believe that it is one which will do you no discredit, and

which, I think, you ought not to refuse. Will you trust yourself with me, and go to a place not ten minutes' drive from here?"

Montana was a little puzzled. He began to doubt whether he had not to do with some crazy religious enthusiast.

"I think," he said coldly, "I should like to know what sort of service I can render you, or what object I could serve."

"You have no right to ask any questions," was the quick answer. "I claim your service. I must have your presence and your assistance. More depends upon it than you can think of now."

"But am I the only one who could be of use?"

"You are the only one," she replied. "Do you think I would have sought you out in this audacious way if any but you could render the help which a human soul now demands?"

"Are you sincere?"

"Look in my face, and say if I appear like one who would waste your time to no purpose." She threw up her veil, and showed Montana certainly a very handsome face, with bold dark eyes that looked into his own without a gleam of admiration or homage or coquetry, but only earnest resolve.

Montana became a little interested.

"It is not far, you say?"

"Ten minutes' drive," said she. "My carriage will take you there. I am a lady, although what I am doing now might not lead you to think so; and I know you don't care for ladies. You would grant my request much more readily, I dare say, if I were a poor milliner's girl. No matter; I cannot help myself. I must be what I was born. And now let us waste no more time. Come with me."

Montana took his hat, and went with her. They got into a carriage, and drove in silence through some streets and squares. She never spoke a word, neither did he. It did not escape his observation, as she moved once or twice in the carriage, that under her veil and cloak she was in evening dress.

They came to a stately house. Montana got out and handed her from the carriage.

"Come with me," she said.

They passed up a flight of stairs, amongst many servants and some bustle. Montana was more and more puzzled. She drew him into a small side room, threw off her veil and cloak, and showed her tall and very handsome figure in evening dress. Then, with a laugh, she said:

"Mr. Montana, you don't know me. I am Lady Vanessa Barnes,

and my mother is the Duchess of Magdiel. I tried to get hold of you in a fair and open way. I sent you invitations again and again, and you would not come. So I determined to carry you off ; and I have carried you off, and played this ridiculous game ; and you will only look foolish if you don't fall into the thing now, and let people think you came here of your own free will. Otherwise it will be all over the town to-morrow that the great Mr. Montana was made the victim of a practical joke by Lady Vanessa Barnes. You can't help yourself ; so come, forgive me, there's a dear man, and let us go into my drawing-room, and I'll present you to my mother."

Montana had at least one great quality of leadership. The more sudden a difficulty, the more quickly he saw how to deal with it. When driven into a dangerous corner, all his hesitancy and viewy vagueness left him, and he could survey the whole situation and make up his mind what to do in an instant. He saw at once that, trivial and ridiculous as his present embarrassment might appear, it was really serious for him. It would never do if it were to get known through London that the great mysterious leader of men had been made the victim of a saucy young woman's practical joke, and turned into the laughing-stock of a fashionable drawing-room. Anything must be done to avoid that. He at once accepted Lady Vanessa's invitation, and took her apologies with a gracious gravity which almost impressed her. He met her guests, was the lion of the evening, was inexpressibly polite to the Duchess of Magdiel, condescending to the Duke. He managed somehow to give the Duke and Duchess, and many other people, to understand that he had come there solely to oblige Lady Vanessa. He spoke of Lady Vanessa with an almost paternal tenderness. Every one assumed that she was among his most devoted followers and closest friends.

Lady Vanessa herself was positively bewildered.

"Call me good at acting !" she said to herself. "I can't compare with him. I'm not in it at all. One would think the man had dandled me in his arms in my innocent infancy !"

She had gained her point, however, and felt grateful to him, and was determined never to let any one know what she had done. She began to feel interested in him, and to have a sort of admiration for him. His coolness, and what she would irreverently have called his "cheek," overpowered her.

Montana was determined, for his part, to exhibit Lady Vanessa everywhere in the character of his close friend and pupil. In no other way, he thought, could he escape the risk of being one day or other made ridiculous by the true story getting out. He would

exhibit her in the East End as well as in the West. The congregation of the Church of Free Souls must see the beautiful and high-born Lady Vanessa accompany him thither one Sunday. That would make all safe. Even if the story got about then, it would not be believed. Montana felt a good deal interested, too, in the sprightly audacity of the young woman. The very manner in which she had made light of him gave her a curious interest in his eyes. He was weary of the adoration and adulation of women. He positively admired this woman who had laughed at him, and was ready, if opportunity should arise, to laugh at him again. He had been drawn to Geraldine Rowan from the first by her evident dislike of him, and the resolute manner in which she repelled him. He was growing into a profound, and for him an almost impassioned, admiration of the girl who had thus treated him. He was beginning to believe that Geraldine was the indispensable companion of his life and sharer in his plans. He told himself that she was predestined for him, and he predestined to conquer her, to make her love him, to make her become his wife. He had set his heart upon this ; and in what he set his heart upon, Montana always saw the finger of Providence. It was not so much that he loved Geraldine, but that he would not do without her ; she must marry him.

In a very much modified and milder way he felt a desire now for the friendship of Lady Vanessa Barnes. The lady, for her part, liked his company well enough. It amused her to go about with him here and there ; to drive him in her pony-carriage ; to exhibit him in the Park ; to parade him at Mr. Barnes's dinner-parties. He was still as much as ever the lion of the season, and it was something for her to be always able to command his presence. She had tried to penetrate into the story of his early life, and the one only return she had for her curiosity was an impression which somehow seemed to be conveyed to her that he was a man of high birth, who had deliberately made up his mind at an early age to sever himself from the society to which he naturally belonged. He did not say this to her, but she came to think it ; perhaps had fancied it all for herself. Still, when she did jump to the conclusion, she let Montana know quickly enough that such was her conviction, and Montana did not contradict her or set her right. He only smiled a sweet vague smile, and said nothing. He was about this time beginning himself to think that there must be some truth in this theory of his lofty ancestry and stately youth.

It was easily arranged, then, that Lady Vanessa and her husband should go with Montana one Sunday to the Church of Free Souls. On

the day appointed for the expedition Montana was himself to deliver an exhortation to the Free Souls who lived on the smoke-wreaths of doctrine that went up from the altars of that temple. Montana came to the church with Lady Vanessa and her husband in their carriage; he handed Lady Vanessa out in the full sight of an awe-stricken crowd. Even the most uncompromising democratic spirits of the place were pleased to see their prophet in aristocratic company.

The Church of Free Souls was very crowded on this particular day. To get to see Montana, even for a moment, was the ambition of a great many. To be able to hear him speak was a thing to struggle and crush and wrangle for. To hear him speak from what in an ordinary temple would have been called a pulpit was to confer on oneself a sort of distinction for the remainder of the season. Then, the peculiarity of the place in which the discourse was to be held, and its odd out-of-the-way situation, lent a new and weird charm to the attraction of the day. Therefore the Church of Free Souls had had a specially strange and motley congregation. Carriages thronged the narrow ways that led to it. Unwonted silks and satins rustled through its dingy passages and up its decaying stairs. Huge servants in plush, with powdered heads, lounged about its rickety doors, and looked mildly contemptuous at the slums and the people around. Artisans, with close-cut hair and keen dark eyes, hustled their way impatiently through this fashionable throng of fine ladies and finer footmen. Professional-looking young men, with rounded bulging foreheads and spectacles and long colourless hair, were pushing eagerly in. Young women in waterproofs, and with uncared-for locks and fringes, represented clearly the speculative part of the fair sex—the ladies who have “views” as to woman’s rights on this side of the grave, and are aggressively sceptical as to anybody’s rights, wrongs, or existence on the other.

Just as Montana was handing Lady Vanessa out of her carriage, another carriage brought up Captain Marion, Geraldine, Sydney Marion, and Melissa. Melissa grew red and her eyes shot angry fire as she saw the leader’s attention to the great lady of whose friendship for Montana she had already heard. For the first time in her life Melissa began to form political opinions, and they tended very decidedly in the direction of Radicalism. It flashed through her mind at that moment that the only thing which could make the world sufferable to rational and high-spirited persons would be the instant abolition of the order of aristocracy, and it is not certain that there was not at the same time in her breast a special yearning for very severe measures to be taken against the feminine members of that order.

Montana only saw Lady Vanessa as far as the inner door of the temple. He then withdrew to enter the building by a side door, intending to remain in seclusion until the moment should arrive for him to come out upon the platform and begin his discourse. Montana made it a rule never to exhibit himself to a congregation of any kind before he had to speak, or after he had finished speaking. He kept out of sight, in mystic seclusion, until just the moment came for him to begin his address. Then he presented himself to his admirers, and the moment he had done speaking he bowed and withdrew. Even if he had to be one of many speakers at a public meeting, he always took care never to arrive at the place, or at least never to come on the platform, until it was his turn to go on. He had an impression that for an audience to have a man long under their eyes diminishes their interest in him. They grow familiar; they are critical; they begin, perhaps, to study minute points of appearance, of dress or deportment. The glory of a leader's presence might thus have its lustre worn away. Montana always took care that, as far as might be, his dress should be faultless. He wore it of the latest fashion of whatever civilised country he happened to be travelling in. To him there always seemed a dash of the vulgar about the ambition of some persons to look like foreigners, even like picturesque foreigners, in any country. Montana's principle was to dress up to the newest fashion of the people surrounding him; and to let his personal appearance impress by its own merits, without aid from oddness or foreign ways.

The audience was settling down. An observer of any keenness could not have failed to notice its curious and motley composition. The mingling of rich and poor is of course a condition of all congregations; but congregations do not usually exhibit many different types of class-character, if such a word may be used, and of intellectual and moral individualism. Almost every man and woman here appeared to represent a separate mental order. So, at least, it seemed to Geraldine, as she looked round the nearest benches. Katherine sat by her, flushed and eager and nervous; Melissa pale, with down-cast eyes, as if she hardly ventured to look up. Mr. Trescoe was supposed to be somewhere about the building, but he had got lost, and nobody took any trouble to find him. Clement Hope came in, and on his arm as he went up the hall leant his stately father. Many eyes turned towards the tall handsome young man, and the still taller old man with the fine head of grey hair and the broad shoulders, and the dignified half-soldierly bearing. He seemed to lean on Clement's arm more out of affection than because of any need of a

staff or prop to sustain his steps. The congregation inclosed many remarkable faces and many remarkable pairs, but none, perhaps, more so than Mr. Varlowe and Clement.

There was a long service before the orator of the day appeared. The spiritual guide who usually conducted the ministrations of the church began by reading various portions from the theologies of all countries, the object of this exposition being to show that, whatever men might have said, or thought they said, or wanted to say, at all times and in all ages on the question of the soul and the future life, they all believed exactly the same thing, and that the more strongly they contradicted their neighbours the more irresistibly did they prove that they and their neighbours were in complete accordance. Confucius and Pascal, Mahomet and Cardinal Newman, Torquemada and the prophet Ali, George Fox and Dryden's Shaftesbury, were satisfactorily made out to have been in the most full and exquisite harmony in regard to their religious beliefs. The only objection, indeed, which the preacher seemed capable of suggesting with regard to the theological views of men in all ages and in all countries, was that a certain monotony pervaded them, and that it would have been rather better if they could now and then have managed to get up a slight difference of opinion, if only for the sake of adding interest to their speculations. The preacher then delivered a short discourse of his own, in which he explained that the great orator, teacher, soldier, and preacher from the New World, the man who himself proposed to found another and a newer world, had consented to offer a few suggestions to that congregation to-day. He gave a brief outline of Montana's career, glowing into a kind of eloquence as he went on, and described Montana as one who had been warrior, explorer, pioneer, political leader, and spiritual guide, and who now, he said, had been able to lay the hand that had wielded the sabre and the pickaxe in the soft clasp of London fashion, and had bidden the West End to throb with a new and noble pulsation. He drew some such picture of Montana in the fashionable circles of London as Horace Walpole in two or three lines has done of Burke amongst the nobility and the wits of Paris, where the charm and earnestness of Burke for a while, we are told, made Christianity fashionable. He alluded also to Montana as a man who originally came from the Old World, and, he vaguely hinted, from some great old family. The impression left upon the minds of the congregation was that Montana's birth and parentage were of a lustre fully in keeping with that of his personal career. If he condescended to clasp hands with the working men as they were, it was not because he might not have

lived, if he chose, all his life in the drawing-rooms of duchesses and the ante-rooms of palaces. The speaker so fully believed all he said, and was evidently so thoroughly impressed by Montana, that his discourse fell with strong effect on the expectant congregation. Those who had seen Montana and those who had not seen him were alike eager for the moment when the hero of the hour should make his appearance.

At the right time, and from a side door to which people's eyes would not naturally have turned, Montana suddenly came out and stood in an instant full in face of the congregation, on the platform from which the former speaker had just been addressing them. A pale ray of sun found its way through the blurred panes of one window, and fell slanting on Montana's head and face. He looked handsome, impressive, and almost unreal as he stood for a moment in perfect silence, and with his eyes looking directly at the congregation, and seeming to search into the thoughts of every man and woman who gazed at him.

There was a moment's pause, and then Montana had just begun with the words "My brothers and my sisters," when a cry from the midst of the hall turned every eye and every thought away from him. The cry came from the lips of the tall white-haired old man whom people had noticed not long before as he entered the church. Rising to his feet and clutching the rail of the seat before him, Mr. Varlowe fixed his gaze on Montana, and called aloud, "Oh, Absalom, my son ! my son !"

CHAPTER XV.

"DOETH NOT A MEETING LIKE THIS MAKE AMENDS ?"

PERHAPS, if Montana had not had time to resist the first impulse of his mind, he might have given in to what certain writers call "the voice of nature." Perhaps he might have welcomed with outward satisfaction at least his father's recognition, and owned himself the long lost son. But unluckily for him, he had time to reflect. He could not stop in the middle of his discourse. He had to go on, and while going on he was well able to detach his thoughts from his subject and think over the course that was best for him to take. His eloquence did not cost him much trouble. The words came easily ; the thoughts were vague or very slender. A thread of idea was able to water a whole field of phrase. He was free to let his eloquence stream away as it would while he tried to review his position and

decide as to his course. He was not long undecided. Before he had got through half a dozen flowing sentences of monotonous eloquence and vague grandeur, he had made up his mind.

Perhaps even then, if Lady Vanessa Barnes had not been with him, if she had not been brought into the place by him, if he had not exhibited her as a sort of stately captive in front of the whole congregation, he might have taken the part for a moment of a sincere and honest man, and gained by it in the end. But he could not resolve to step down from his pinnacle of greatness in her presence. Just now he had the superiority, but in a moment the tables would be turned. He dreaded her free and thoughtless laughter, her ridicule and her contempt. He knew what sort of story she would make for her friends of the ridiculous scene she had witnessed in the East End church when the great leader and prophet, whose descent was veiled in a mystery almost as sublime as that of one of the sons of the Greek gods, was claimed in the church by a retired livery-stable keeper, and had to confess himself the son of such a father. Rather than suffer that, Montana thought, he would do anything. He kept telling himself all the time that it was not for any idle pride of his own, but for the sake of the cause. What would become of the cause he was to lead, the people whose chief and prophet he was to be, if he were thus made a theme for aristocratic ridicule and popular laughter? Then, after all, perhaps the old man was mistaken. There was still hope. It might turn out that the man was not Mr. Varlowe and his father, but somebody else; and in any case, is everything true that one fancies has happened in his childhood and his youth? Perhaps it was all but a dream, the memory of that old narrow vulgar time in the coarse Northern town, when the youth of genius was still only dreaming of a career; that time when even love itself seemed a burden to an ambitious young man determined to dazzle the world, and still kept back by the clinging arms of his tender wife. All that ought to be a dream—ought to be only as smoke and cloud in the career of a great man, to be puffed away from the memory and regarded as nothing. Montana made up his mind. He put it to himself in one moment and in one phrase. The phrase suddenly rose up in his mind, and it nearly came to his tongue. It satisfied him; it suited him as well as a code of morality. The phrase was this: "The man who would do great things belongs to the future, not to the past."

Montana stood erect upon his platform, determined to belong to the future and not to the past. He saw his father's eyes fixed on him with intense and wistful eagerness. He could see that Clement

Hope was striving to keep the old man quiet, probably until some seemly moment should come for a meeting between him and his supposed son. He could see astonishment in the eyes of many people. He could see Lady Vanessa Barnes look up to him with amused curiosity in her looks. He turned his eyes composedly away and began his discourse.

The discourse was surely very eloquent. It must have been. It told of "the continuity of the human race." It established the principle that men in this world, and in whatever world, are capable of working in constant unbroken co-operation; that the workers in other spheres are influencing us by their help and sympathy and their encouragement if we be only worthy to receive it; and that we in our turn can spread the widening circle of our influence to realms of whose composition and population we have no conception now. To some of his listeners it seemed an almost angelic eloquence. Montana's voice was so sweet, sonorous, and musical; his action was so graceful, his look was so intense, that some who gazed on him and listened to him seemed to be lifted into a higher and a purer atmosphere than that of the common day. Some there were, probably, even in that hall, who found a certain difficulty in understanding what Montana was talking about, who did not quite see that he had clearly made out an immediate connection between themselves and everybody else in all creation, and who even had a sort of doubt as to whether Montana really knew much more about all the other worlds he was describing than they did themselves.

Perhaps, if Clement Hope had had a mind free to pay any attention to the subject, he might have become a little sceptical too; but happily for his continued faith in his leader, his whole soul was absorbed in the effort to keep Mr. Varlowe in decorous restraint. He was so agitated and perturbed by what had happened, and what he feared might again happen, that he had no thought for the words of the orator. The sweet full voice sounded in his ears, but brought with it no meaning to his senses.

As for Sydney Marion, she tried to catch a gleam of distinct meaning now and then, honestly tried, and honestly reasoned with herself as to whether it was not her stupidity, and whether, after all, the people around were not right, and the discourse was not eloquent, entrancing, exalting. But it came to an end without having convinced her that she was wrong.

Lady Vanessa listened with good-humoured indifference—that is to say, she listened to a passage now and then, and, as she did not care much about the continuity of the race, she allowed her thoughts

to wander away to anything else. The incident which preluded the discourse astonished her for a while, but she assumed that it was really only the case of some crazy old man whose admiration for the great Montana had led him into some ridiculous demonstration. That sort of thing, for aught she knew, might be one of the ordinary ceremonies of the Church of Free Souls. She remembered having been taken when she was a child to some sort of church or meeting-house, or religious assemblage of some kind, where an old woman got up and sang a queer crooning chant in the middle of the ceremonies, and nobody seemed shocked or even astonished ; therefore, for all she knew, grey-haired men might be crying out symbolical recognition of imaginary sons at every meeting in the Church of Free Souls. Such might, in fact, be only the accepted way among that congregation of expressing admiration for the preacher ; something in a manner equivalent to the "hear, hear" of the House of Commons.

As for Geraldine, she, like Clement Hope, was wholly absorbed by the strange incident, by the cry of the old man, his wild recognition of a supposed son. Her eyes were fixed all the time on him and on Clement. She watched with the deepest sympathy and interest the young man's eager efforts to keep the old man from again disturbing the quiet of the audience. She admired Mr. Varlowe's face and figure. He seemed the artist's very ideal of a noble and a loving father claiming a long-lost son, if one were seeking such subject for a picture. She felt deeply for Clement. She assumed that some pathetic memory must have proved too much for Mr. Varlowe, and made him for the moment like one distraught, and she was grieved to think of the pain that would have to be borne by poor Clement if the mood of distraction should last. She felt a strange longing, which it would have needed some courage to gratify, even in that odd place—a longing to go over and take a seat at Mr. Varlowe's other side, and help Clement in trying to quiet him, and comfort him, and reason him out of his delusion. Indeed, she was so impulsive a girl that, if Sydney Marion had not been with her, it is quite possible that she might have made an attempt to carry this longing into action. But under Sydney Marion's quiet eyes she felt morally coerced into remaining quiet, and so she sat and endured Montana's discourse, and did not even try to catch the meaning of one word of it.

The discourse came to an end at last. Montana descended the steps of his platform slowly, and with his accustomed air of unruffled composure. He looked earnestly to where Mr. Varlowe and

Clement were sitting, and his look was full of sympathy and commiseration. Some kindly wonder and curiosity were expressed in it as well. He almost stopped for a moment as he was about to leave the room, in order to turn one other glance upon the old man who had so strangely interrupted his discourse. Every one saw Montana thus employ his sympathetic eyes ; and many thought it but another evidence, if such were needed, of Montana's tenderness for all men. There were persons who might have been so vexed, even preachers and professed ministers of religion, by any interruption of the kind as to lose patience and pity for the author of the disturbance. But Montana had only sympathy and kindly feeling for this foolish old man, who had so nearly turned the whole proceedings of the day into ridicule.

Why did a sudden ray of strange conviction pierce into the perplexity of Geraldine's mind just at that moment? She never could tell ; but the expression on Montana's face, which deceived so many others, carried instant enlightenment to her. She felt sure that the old man was Montana's father, and that Montana knew it. This had not occurred to her at first. She thought, like everybody else, that the poor old man was simply the victim of an hallucination born of his love and his hope. But Montana's expression as he looked across at Mr. Varlowe seemed to strike home to her very heart with the conviction that he was acting a part. The expression was so carefully, so artificially adjusted for the occasion, as it seemed to her, that it could only be put on for the purpose of playing out a part. It may be that she was helped to this belief by the striking likeness which she suddenly saw in Montana's face and figure to the face and figure of the old man who claimed him as a son. Mr. Varlowe was but Montana whitened with the hoar-frost of time. Montana was but a dark-haired and cold-hearted Mr. Varlowe. Geraldine felt terribly satisfied of the truth of her conviction ; terribly, because there was something appalling in the belief that such a man was an utter impostor, and that nobody would believe it but herself, and that she would have to be that very day, almost every day, in his company.

As Montana passed out of the room, he fixed on Clement a special look of affectionate interest and sympathy. Mr. Varlowe gazed wistfully after him, and made a movement as if he would leave his seat. Clement quietly kept him in his place. Geraldine could see that to Mr. Varlowe's start and gaze of imploring affection Montana only responded by the same look of interested kindness and commiseration, the look of one who feels for some apparent

delusion or sorrow on the part of a perfect stranger. Geraldine felt as if the blood in her veins were turning chill.

Montana remained in the room alone until the short service was over. He was waiting with quiet composure, although with a mind far from quiet, for the inevitable moment, not many moments off, when he must be confronted with his father. The time came. A knock was heard at the door. Montana opened it, and his father and Clement Hope came in. Mr. Varlowe began in his rough Northern way :—

“ You don’t mean to say you don’t know me, Edmund, my boy? You don’t mean to say you don’t recognise your father? You are Edmund Varlowe. Good God ! of course you are. I’d know you among ten thousand.”

Montana turned to Clement and looked into his eyes. Clement’s own gaze had wonder and bewilderment in it. Montana looked him full in the face, and shook his head with a kindly commiserating expression. “ This is Mr. Varlowe, your father?” he asked of the young man.

“ Yes,” said Clement ; “ he thinks you are his son.”

“ Thinks he is my son ! ” Mr. Varlowe exclaimed ; “ God ! I know he is my son. Do you think I could ever be mistaken? I have waited, and watched, and prayed for him to come back these years, and I knew he would come back. I knew he would come all the time, and I knew him the moment I saw him come into that pulpit to preach. Why won’t you speak? Why won’t you say you know me?”

“ My dear old friend,” said Montana sweetly, “ I am sorry, so sorry, to have to disappoint your hopes, your very very natural hopes, to see your son. Assuredly you will see him one day yet—pray Heaven you may. But you are mistaken about me. I am not your son. I could wish I were, to be the son of so fond a father, and to be able to give him back the hope of his life ; but you will trust to a better and a higher hope than I can give you. I am not your son.”

Mr. Varlowe threw his arms wildly out, as if he would call all the world and all nature to bear witness for him in his extraordinary bewilderment.

“ Well,” he said, “ this beats all ! This is what I have been waiting for and praying for these years. This is what I have longed for ; and now it all comes to this ! My son comes back, and he don’t know me, and he won’t know me ! What are you ashamed of, Edmund? Do you think I am poor? I am not poor. I have

plenty of money. Do you think I will trouble you or interfere with you? I will not. You may have any career you like now. I will help you to it. You shall have all my money. You shall have anything. Don't say you are not my boy. Don't, don't say it!"

Montana shook his head sadly and sweetly. He felt no mental or moral difficulty, now that the step was taken. He had decided that he was not the son of the old livery-stable keeper, and, in his present condition, that decision had settled everything. He felt no trouble of conscience, but was serenely satisfied with himself. He was sorry for the old man, but it was only as one is sorry for somebody in a play, or at most is sorry for some stranger whose grief one sees and pities, but cannot share.

Clement tried to draw Mr Varlowe away.

"You had better come, father; and don't you think you ought to say something to Mr. Montana to explain your mistake? You see it is a mistake now, don't you?"

"It is not a mistake," Mr. Varlowe exclaimed in a thundering voice, smiting the floor with his stick. "I never was mistaken; I could not be mistaken in my boy. That is my Edmund, though he casts me off; and he is my Edmund still, though I cast him off now. Come away, Clem, my lad. You are my son now, and you alone; but as sure as God's in heaven, that man there is Edmund Varlowe, who was the son of my wife, Catherine Varlowe, and of myself; and all the world will know it one day just as well as he knows it now. Come away, lad."

(To be continued.)

FACTS OF FAMILY NOMENCLATURE.

WE were told on good authority many years since that the surnames of England and Wales probably numbered from thirty-five to forty thousand.¹ A separate estimate, dating also some time back, reckoned them as reaching to about the same figures.² We shall find reason in the course of these observations for believing that at the present time they must be more numerous still than they were when the calculations quoted were made. To what is it owing that our cognomens are so many—as many, it would seem, at least, as (excluding technicalities) are the words in the English language itself? In pursuing this inquiry, as we propose to do in the following pages, we shall find ourselves brought into contact with several facts of family nomenclature which, as we hope, will prove to be not without interest for our readers.

It will be convenient if at the outset we name a few leading dates with which the subject connects itself, and set down a few memoranda as to the stuff of which English surnames have been made.

From earliest days, wherever the stock of personal names was small in proportion to the number of persons bearing them, there surnames of some kind must have been used for the sake of personal distinction; and it would be hard, nay, impossible, to say when such usage began. But the perpetuation of these added appellatives, in the shape of hereditary surnames such as we now use, is quite another matter. It is not difficult to state approximately the time at which this latter practice arose. Speaking roughly, we may mention the year 1000 as the date of its origin, and the year of the Norman Conquest as that of its introduction into England. But the fashion then imported was not for several centuries generally adopted. It spread but slowly downwards through the social ranks, until in 1538 Lord Cromwell's injunction, under which parochial registration was begun, tended to establish it finally among all classes. It was during the five hundred years thus covered that most of our family surnames were created. After this the possibilities of addition to the stock

¹ Registrar-General's Sixteenth Annual Report.

² Quoted in Lower's *Patronymica Britannica*, p. xxiv.

were narrowed. They were very far, however, from being destroyed, and this will become abundantly apparent as we go on. For three centuries longer—namely, up to 1837, when Lord John Russell's Civil Registration Act came into force—there were certainly frequent augmentations of the cognominal fund. We shall find reason, moreover, for believing that even under the general and greatly improved registration system last referred to—which is still substantially in force—accessions to the number of surnames must have continued to take place.

It will be noticed that the eras here suggested have reference to *registration* ; and there is justification for thus dividing the history of hereditary surnames, since their stability is undoubtedly to some extent affected by the degree of completeness and care with which they are recorded. The periods are three. The first begins in 1066 and ends in 1538. It yields unlimited scope for the creation of permanent cognomens, for it is not only the era in which they were but coming into use, but it is also *the pre-registration period*. Such name-records as it produces, whether ecclesiastical, monastic, municipal, or otherwise, are partial and irregular. The second period extends from 1538 to 1837, and presents diminished opportunities for cognominal increase. It is the era of *parochial registers*. The surnames of the people, now hereditary in all ranks, are more or less regularly set down in writing. The third period consists of the forty-four years of modern civil registration. This system remedies many defects and omissions peculiar to that which preceded it, and which it supersedes without destroying. Hence it restricts more than ever the possibilities of addition to the denominational total.

Passing on to the *materials* out of which our surnames have been made, we must set in the first place the names of towns, villages, and estates. Under the feudal system, landed possessions naturally gave names to their owners, while at markets and other public meeting-places persons bearing the same baptismal names were often distinguished by the names of the parishes or hamlets in which they lived ; or, again, migrants from country to town, or from city to city, associated by new neighbours with the places they had travelled from, came to be called by the names of those places. It must be remembered that, when surnames were taking permanent shape, *any personal appellation* was liable to become hereditary.

It was long ago noticed that every town, village, and hamlet in England has afforded a family name. It may be observed that persons have often paid back to place-nomenclature the appellations borrowed from it, and may indeed sometimes in the first instance

have conferred upon it their own names. The exchange thus occasionally carried on has been exemplified as follows:—"First, Gomerie the man fixes his dwelling on a hill, and the place is called after him—Mont-Gomerie. Secondly, Mont-Gomerie the place gives name to Roger de Montgomery the man. Thirdly, Montgomery the man, following the fortunes of the Conqueror, founds and calls after his own name Montgomery in Wales. Fourthly, Montgomery the place again in its turn gives surnames to men." ¹

With cognomens drawn from names of places are to be ranked those created by the situations or circumstances of dwellings. The jutting cliff; the airy heath; the sheltering oak, ash, or elm; the "brook that babbled by;" the wayside crucifix; the rustic grange, or ford, or stile; all these and many other kindred objects lent their names—varied in a hundred ways as their special characteristics differed—to the inhabitants of houses placed near or amidst them; and like others, these names became hereditary. The *Atwells*, the *Brookers*, the *Bygroves*, the *Coombses*, the *Greens*, the *Moores*, the *Nashes*, the *Redcliffes*, the *Rudmans*, and many others among us to-day owe their family denominations to the source we refer to. Such names must have been conferred by the *immediate neighbours* of those whom they first distinguished; while the names of hamlets, villages, towns, and shires must have been acquired more or less at a distance from those places.

The great sum of *local surnames*, which there is good reason for supposing constitutes a majority of the entire number of family appellations now existing, has been further swelled by immigrants from Scotland, from Ireland, and from foreign shores, who have added to it the names of their native countries, provinces, and cities, or such approximations to those names as English tongues have been able to pronounce.

Trades, occupations, and offices have, as every one knows, given family names to large numbers. The familiar *Smith* is the most prominent example of the trade-names. The Registrar-General has shown by his figures that it is what it would be expected to be, the commonest surname in England and Wales; and *Taylor*, a kindred cognomen, stands fourth in point of frequency.² The thatcher who sheltered our fathers from the storm; the flesher who fed them; the crowder who fiddled for their entertainment; the showler who covered them in their last earthly resting-place—each has bequeathed the name that his calling gave him to descendants who

¹ *The Teutonic Name System*, by Robert Ferguson, p. 489.

² Registrar-General's Annual Report for 1853, Table xvii.

are amidst us to-day, for any London directory will disclose *Thackerays*, *Fletchers*, *Crowthers*, and *Shovellers*. And so with innumerable other toilers of the past, in innumerable divisions and subdivisions of industry ; so, too, with various ancient office-bearers, whose offices are now, it may be, extinct, or newly named, or not easily traceable in the names of their representatives, by reason of altered spelling. Some surnames of the occupation class, as *Cookson*, *Hindson*, *Stewardson*, and *Wrightson*, indicate that their first bearers were distinguished, not by their own trades or callings, but by those of their fathers.

Baptismal or personal names constitute a third great fund from which the necessities of family nomenclature have been supplied. They have become surnames, not only in their complete forms, but in the many familiar shapes which usage may have assigned to them—as the monosyllabic appellatives once current in the workshop or on the farm, and as the affectionate diminutives that found favour in the domestic circle. Thus with the everyday *Richard*. “From the name proper,” says a careful student of parish registers and an interesting writer on surnames,¹ “we get *Richards* and *Richardson*, *Ricks* and *Rix*, *Rickson* and *Rixon* or *Ritson*, *Rickards* and *Ricketts*. From the curter *Dick* or *Dicon* we derive *Dicks* or *Dix*, *Dickson* or *Dixon*, *Dickens* or *Diccons*, and *Dickenson* or *Diconson*. From *Hitchin*, once nearly as familiar as *Dick*, we get *Hitchins*, *Hitchinson*, *Hitchcock*, and *Hitchcox*.” Most surnames of the family now under consideration add to the personal names on which they are based either the possessive “s” or the more explicit “son,” these being the Saxon patronymic forms, as the prefixes “Fitz” and “Ab” or “Ap” (from Mab=son) are respectively the Norman and Welsh. But some are devoid of any such explanatory modifications. There are, for example, ancient Anglo-Saxon names now existing as surnames in their original shapes. Of these it is conjectured that in post-Norman days they were revived by persons of Anglo-Saxon origin, and adopted by them as family surnames in deference to ancestral memories. Of the first transmitters of patronymic surnames in general, it may be safely assumed that they were the *stay-at-homes* of their families—the domestic and unambitious ones who were content to tread quietly in their fathers’ footsteps. While the enterprising brother travelled to a distance, and acquired a surname, perhaps, from the remote town or shire of his birth with which new associates identified him ; while the brother of strong predilections

¹ Rev. C. W. Bardsley, M.A., author of *English Surnames*. Chatto & Windus, Second Edition, p. 40.

seized his favourite occupation, and extracted from it his distinguishing appellation—the least sanguine, least original of the three, betook himself calmly to his father's business, was naturally called merely *the son of his father*, and handed down to his descendants a surname based upon that father's baptismal denomination.

The remaining cognomens existing in England seem to have been very variously derived. Personal characteristics ; the animal, vegetable, and mineral worlds ; incidents of history ; abstract ideas ; symbols ; social and domestic relations, &c., have supplied or appear to have supplied them. But in family nomenclature—and especially in that branch of it of which we now speak—it is emphatically true that “things are not what they seem ;” and the name-lists formed in deference to the *semblances* of their component denominations are found to be much battered when etymology has been brought to bear upon them. The miscellanies under consideration certainly include a large number of *nick-names* ; and many of their oddities again are traceable to the *signs* so universally adopted by the town tradesmen of former days.

It will be allowed that the several sources of family nomenclature mentioned are sufficient in themselves to have produced a very large number of surnames. Let us now consider the causes which have operated in the further multiplication of the cognomens so created. Foremost amongst these is the *inexact orthography* of past times, which resulted from the habit of spelling by ear. The name *Shirecliffe* has been found spelt in fifty-five, and *Mainwaring* in one hundred and thirty-one different ways.¹ To take a couple more examples—from the opening days of our second period : “Our great poet's name appears *Shakspeare* in the register of Stratford church ; it is *Shackspeare* in the body of his will, but that very instrument is indorsed Mr. *Shackspeare's* will. He himself has written his name in two different ways, *Shakspeare* and *Shakspere*.”² The writer whom we quote also instances Sir Walter Raleigh's surname, which was spelt by himself and his contemporaries in all sorts of ways—*Ralegh*, *Raleigh*, *Rawleigh*, *Raweley*, and *Rawly*. By such various renderings as these, large numbers of practically new surnames have been originated. It will have been observed that even slight differences in the spelling of surnames probably identical are in the present day sometimes carefully maintained by their owners as though denoting different origins. It would never do to class the *Smythes* at the Hall even denominationally with the *Smiths* at the shop ; yet

¹ Lower's *Patronymica Britannica*, p. xix.

² Disraeli's *Curiosities of Literature* (Orthography of Proper Names).

possibly the self-same armourer of the middle ages was the progenitor of both families.

All other corruptive forces tend likewise to multiply the surnames which they assail, for the reason that they operate only upon *some representatives* of the several cognomens, leaving others untouched. A few of these forces may be stated. A common one has been an habitual attempt on the part of the people to *make sense* out of surnames of unaccustomed sound—to shape the unfamiliar words of family nomenclature into others more homely to which they may have borne slight resemblance. An unworthy insular trick of caricaturing foreign words has had a like effect. Here and there, for example, the surname *Argument* is to be met with. It is believed to be a corrupted form of *Aigu-mont*¹ a surname originally acquired by some man who dwelt either on a sharp-pointed hill or in the Norman hamlet which had already from its position been thus styled. If, therefore, this account be correct, *Argument* and *Montagu* are similarly derived. But English lips being less used to Norman nomenclature than to that synonym of debate which has come to suggest also heat and obstinacy, have at once extinguished a doubt and parodied a French word by shaping *Aigumont* into *Argument*. *Pew* affords a somewhat similar instance ; but here the familiar sense is attained, not by modified sound, but by altered spelling only. *Pew* is simply *Pugh* or ap-Hugh = son of Hugh, the common Welsh surname ; but in England the cognomen has not seldom been rendered in the first-named prosaic form. Nowadays pews generally suggest the desirableness of a *restoration* ; and it might be thought that the *Pew* in question might at least be restored to *Pugh* without much risk of error. But the case is rather one exemplifying the danger of such attempted renewals ; for it so happens that the *Hugh* and therefore the *Pugh* which come from Wales are erroneous. “ The true Anglicised Welsh form ” of the Keltic name set forth in them “ is *Hu* or *Hew*. ”² *Pew*, therefore, when of Welsh descent, is not so wrong after all ; though we venture to regard its correctness—in some cases at least—as owing to the tendency now under consideration. In the same manner, *Goodluck* is considered to have been made from *Guthlac* ; *Tremble* from *Trumbold* ; and *Gumboil* from *Gundbald*—the originals being all old personal names.

The inclination to save trouble in pronunciation is strong and general. It could not be expected that surnames would escape the effects of this inclination, and in fact they abound in tokens of its

¹ Lower's *Patronymica Britannica*.

² Miss Yonge's *History of Christian Names*, vol. ii. p. 27.

agency. Sometimes their syllables have been boldly slurred over and at last dropped, as in the cases of *Cholmondeley* and *Brambleby*, which, having in the first place come to be sounded *Chumley* and *Brambley* or *Bramley*, have since been sometimes written and transmitted in those forms. *Sevenoaks*, in like manner, first shortened into *Sennoks*, now takes the still more concise form of *Snooks*; and *Sparke* was once a nickname three syllables long, viz. *Sparrowhawk*. Terminations are especially liable to be clipped. *Ings*, for example, a common ending to English cognomens, has often been pared down to *ins* or *ens*; *Living*s to *Liven*s; *Rawling*s to *Rawlin*s, or by further compression of sound to *Rollins*. In such words as *Vincent* the final consonant is dropped, the result being *Vinson*, *Vinsun*, and the like. Vowel sounds undergo frequent curtailment; compounds are simplified, and the long shrinks to the short. *Byhouse* has thus been reduced to *Byus*, *Caird* to *Card*, *Tearall* to *Turrell*, and, with some additional abbreviation, *Poland* to *Pullen*. The omission of the letter H in pronunciation has left its mark upon surnames. *Alkins* has been shown to be *Halkins*—(a diminutive of Henry in the genitive case)—less its aspirate; and *Anger* owns no connection with the passion, but represents *Hanger*—the name given to a wooded slope in the South of England, and sometimes consequently to those dwelling at or near such places.¹ *Arris* and *Arding*, both to be found among English surnames, yield further examples of the omission in question.

But, on the other hand, a tendency exists to misapply *familiar* syllables and *accustomed* literal conjunctions, although their utterance may be more troublesome than that of the sounds for which they are substituted. Sometimes perhaps this is only a lesser manifestation of the proneness already noted to shape the stranger vocal expression into the homelier. Surnames give evidence of the bias we refer to as well as of its opposite. *Ings*, which is liable as we have seen to be improperly clipped, occasionally as improperly takes the place of the simpler endings to which it is elsewhere made to give way. So *Wickings* has here and there arisen out of *Wickens*, which is itself a debased form of *Wilkins*, a diminutive of William; and Austin has sometimes been corrupted into *Austing* by a relative process.

The *misapplication* of the letter H may here be referred to. It seems to arise from exactly the same *insensibility* with regard to the aspirate which leads to the omission of the sound where it ought to be heard. It has had startling effects on family nomenclature. In

¹ To *Anger*, however, has also been ascribed an entirely different origin.

Gloucestershire, Herefordshire, and other neighbouring counties, the surnames *Heaven* and *Heavens* are found. They would at first sight be supposed to indicate some reference to that place of happiness which piety trusts at last to reach—the place that is lifted or *heaven* up high above earth. But such is not the case. They are merely false versions of *Evan* and *Evans*, the familiar Welsh cognomens representing the personal name *Evan*. We have noticed *Hambrose* in Kent; and near Clun, in Shropshire, the less intelligible *Hints*. The latter may probably be the same as *Hince*, which is to be met with in the neighbourhood mentioned; and *Hince* is apparently an improperly aspirated *Ince*, a well-known surname of the local class derived from places in the north-western shires. *Wood* is a family name that has sometimes been completely transformed by the misapplication we are speaking of in conjunction with another vulgarism. It will be remembered that initial *W*'s are often disregarded by the lower classes in all parts of the country. The leaning in this direction makes *Wood* into *Ood*, and the word thus denuded takes shelter under the aspirate and becomes *Hood*. It has been suggested that the name of Robin Hood the famous outlaw underwent the transformation just noticed, and that it was really *Robin of the Wood*, that is, Robin of Sherwood Forest. Be this as it may, *Hood* is believed to have an independent existence and origin as a surname. It is held to be either a corruption of an old personal name, or to be commemorative of a peculiar headdress worn by its first transmitters.

Provincialisms of pronunciation are worthy of a few words or separate remark in reference to their corrupting effect on surnames. In Wilts and Somerset talk the sounds of *ar* and *or* change places. The *card* is tied round the trunk; the address is written on a *cord*. There can be little doubt that *Archard*, now a distinct surname, arose from *Orchard* through this transposition; and *Kortright* has perhaps proceeded from *Cartwright* in like manner. A well-known drawl of pronunciation in the same shires has created *Aish*, *Naish*, and *Paish* out of *Ash*, *Nash*, and *Pash*. *Vranch* is, we believe, *French* phonetically written, as uttered by Dorset labourers. One of Sidney Smith's stories turns upon the Yorkshire way of pronouncing *Ambrose* as *amorous*. Whether *Amorous* now exists as a surname we are uncertain; but as a Christian name we have found it, and it is likely to have been made such by the local utterance on which the humourist's tale is based. There are some cases in which provincialisms obliterate distinctions between separate cognomens. *Gay*, a family name of the variety created by personal characteristics, is

broadened by Wiltshire tongues into *Guy*, and is believed to have become mingled with that denomination which is merely the personal name of various associations, from squibs and tar-barrels to the Round Table. In Northamptonshire *Guy* would certainly be sounded *Gay*, and this county may have effected a restitution to the latter surname of what Wilts has taken from it. *Sherwood*, a cognomen of the *local* family, is in some parts of the country popularly called *Sherrad*, in which form it is likely to pass into *Sherrard* of separate origin. *Assumption* is a name that was formerly given in baptism to children born on the Church festival. Thus acquired by individuals, it would, according to the frequent usage of our first denominational period, readily become a surname. In the West of England it appears shorn of its first syllable in the family denomination *Sumption* or *Sumsion*; but here by vulgar local pronunciation it becomes *Simpson* or *Simson*. Thus a cognomen with a history of special interest is liable to be lost in one of commonplace lineage, for *Simpson* or *Simson* usually means merely Simon's son, although possibly, as has been suggested, it may sometimes have been derived from *Samson*. With provincialisms *cockneyisms* may be considered. Cockneys are probably largely answerable in the first place for the denominational results (already referred to) of an omitted or wrongly inserted aspirate. They too it seems to be who have occasionally exchanged the initial *W* of surnames into *V*; shaping *Walters*, for instance, into *Valters*. "Perhaps," says an amusing writer, with respect to the converse of this transposition, "to cockney usage it may also be owing that the surnames of *Vinegar*, *Vulgar*, and *Viper*, are sometimes seen as *Winegar*, *Wulgar*, and *Wiper*."¹ It would not usually be in the place where the peculiar mode of utterance prevails that the writing of the surname would begin to follow the pronunciation; but at a distance, where perhaps the appellation itself, and certainly the peculiarity of speech, would be unfamiliar. The migrations of labourers, which at different times during late years have gone on so largely from the agricultural districts to the centres of manufacturing industry, have supplied exactly the conditions under which the kind of corruption now referred to is likely to take permanent shape. The young migrants would carry with them their provincial speech, and unluckily their ignorance also; in the adopted home of improved pay and prospects they would become husbands and fathers; and in dictating there the registers of marriage or of birth they would be not unlikely—labouring under the

¹ *English Surnames as seen in Groups*, by C. L. Lordan. Houlston & Sons. Second Edition, p. 45.

double disadvantage of uncouth utterance and inability to spell—to signify their surnames to the parson or other registrar in ways leading to error. Here, then, is exemplified the kind of process by which, even under the improved registration-system of our third period, family denominations may still be corrupted, and so multiplied. Under that system the *testimony of the informant* is necessarily made the basis of the register. It is mostly beyond the registrar's power to correct supposed errors, or to suggest solutions of doubts as to the rendering of surnames, from knowledge or inference of his own. Checks may be applied and proofs obtained in a few instances; but there are many more cases in which none such are within reach.

Foundlings, presenting themselves to society nameless, have afforded and continue to afford opportunity for additions to the sum of surnames. It has been sometimes supposed that *Bytheway*, *Bythesca*, &c., arose from the finding of their first bearers in those situations; but dwellings so placed are more likely to have originated such titles. The days of the week and the months of the year have named many foundlings. So also, probably, have festivals and seasons, as *Lent*, *Lammas*, *Easterday*, *Pentecost*, *Christmas*, *Christmasday*, &c.; but as season names have often been given in baptism, they have supplied family denominations mediately as well as immediately. Formerly the little stranger often received by way of cognomen the name of the patron saint of the parish in which he had been discovered. This, of course, might or might not be a novelty among family surnames. Many foundlings baptized at the Temple church were called *Temple* and *Templar*. And places still sometimes supply surnames to the waifs of society. The papers lately informed us that a child found in Addison Road, Kensington, had been named Ruth *Addison*, and that another discovered in Onslow Gardens had been called Michael *Gardens*. At the Foundling Hospital there has been for many years a kindly avoidance of singularity in the surnames selected for the children, but not every one to whose care foundlings may be consigned is so considerate as are the authorities of that Institution. *Troovie* was once given by way of surname to a child found exposed.¹ “The surname *Found*,” says Lower, whom we have before quoted, “was given to a foundling at Doncaster, not many generations since. The corresponding name *Inventus* formerly existed there.” *Found* survives as a family appellation, and *Foundling* itself is also to be met with as a cognomen at the present day. In the birth registers now kept, *all*

¹ Burn's *History of Parish Registers*, p. 73.

the names given to a foundling are necessarily treated as *personal* ; but usage soon separates the appellatives peculiar to the individual from the name which he will share with others if he have descendants.

Runaways of all kinds are liable to acquire unusual denominations which may add to the stock of surnames. With no inclination to reveal their proper cognomens, they are likely to acquiesce in the application to them of the *sobriquets* selected to distinguish them by new comrades ; and these may by usage become so entirely their own, as to describe them in the registers of their marriages and in those of their children's births—thus passing into permanent family denominations. Surnames of this class possess no characteristics by which they may be conclusively identified, but some of the unexplained oddities of hereditary nomenclature may probably be reckoned among them. It is easy to see that the way must still to a certain extent remain open for cognominal increase of the sort now in question ; and thus the nick-names that formerly—and chiefly during the first era of our name-history—so largely swelled the number of surnames, probably continue to do so now, only in a very modified degree.

Illegitimate children in the present day usually take the surname of the mother, that of the father being often given to them as a personal name. Surnames are therefore seldom now added to by illegitimacy. But in the earliest of our three eras, and probably later, curious and novel titles were invented for the baseborn. In the "History of Parish Registers" ¹ a passage is quoted about a certain Joane, illegitimate child of John York and Anne Cooper, who was called *Yorkkoope*. *Bastard* and *Lovechild* express their meaning clearly. Numerous female personal names, or what appear to be such, or their derivations, exist as surnames, and suggest a like origin. Among the number are *Amy*, *Anns*, *Betty*, *Betson*, *Dolly*, *Eve*, *Hester*, *Judy*, *Kitty*, *Maggs*, *Matilda*, *Meggy*, *Molson*, *Pegg*, *Pegson*, *Polly*, *Rosamond*, *Ruth*, and *Susans*. Though many of these, and others like them, are mere corruptions of men's names, a considerable remainder are judged to be veritable metronymics. Such would often, no doubt, point to the illegitimate birth of those who first bore them. But not so, we may suppose, of necessity. A mother of strong and prominent character wedded to a feeble and subject spouse would, we imagine, be more likely than he to furnish a distinguishing appellation for the children ; and this appellation would be as liable as any to become a surname under the conditions

¹ p. 74.

which existed from the Conquest to the Reformation. It may be noted in passing that if some surnames appear to have been caused by illegitimacy when their origin was of a different kind, others must be attributed to it which might not at first sight be suspected of such a connection. *Monk, Abbot, Nunn, &c.*, are among those family names which consideration shows could not have become such by legitimate means.

Many personal names, a large number of them taken from the Bible, have become family surnames as lately as at the commencement of our third period. The scene of the transformation has been Wales, where not long ago it was usual for a boy to receive by way of surname the Christian name of his father, grandfather, or some other relative whom his parents wished to please or honour. Thus *Evan*, son of *John Williams*, having a well-to-do maternal uncle named *Owen Thomas*, might be called after him *Evan Owen*. The father's Christian name, however, most often supplied the surname of the children; and, in the case of the eldest son, the father's names were merely transposed, and *Owen Thomas's* first-born was called *Thomas Owen*. To the present day these usages are to some extent kept up for appellative purposes. But the mass of the Christian names of Wales is as little diversified as is that of its surnames, and hence the novelties introduced into family nomenclature by the practices referred to are comparatively few. Nevertheless, their actual number is considerable. Such surnames as *Absalom, Benjamin, Cornelius, Daniel, Elias, Enoch, Isaac, Jacob, Jehu, Jeremiah, Joseph, Joshua, Matthias, Methusalem*,¹ *Micah, Moses, Samuel, Theophilus, Timothy*, and *Zacharias*, which may be found sprinkled over the Principality, have many of them certainly become hereditary in the way described. To assert this, however, is not to deny that some of the number may also have become hereditary otherwise and elsewhere. But whenever a Hebrew origin is suspected because of a Hebrew surname (most of the above-mentioned, it will be observed, are such), it should be ascertained, before conclusions are drawn, whether the bearer of the family title be not merely a Welshman possessed of a patronymic cognomen but a generation old. The author of the "History of Christian Names" has remarked on the connection between Calvinism and Old Testament nomenclature;² and the dominant religious body in Wales—that, namely, of the Calvinistic Methodists—has certainly adhered to the traditions of its creed in this matter. Modern registration discountenances and will ultimately extin-

¹ *Methuselah* is often so represented.

² *History of Christian Names*, by Miss Yonge, vol. i. p. 19.

guish the custom of applying to children the personal names of their relatives as surnames ; but it has been compelled to recognise appellations created by that custom, and these it has settled and perpetuated.

To the causes of the increase of surnames which have been mentioned, others doubtless might be added ; as the adoption by some families of new ways of rendering their patronymics in order to avoid unpleasant associations, the revival of old modes of spelling, &c. Enough, however, has been said to show that the multiplication has been, and in some degree still is, an easy and natural process, and to extinguish surprise at the number of family denominations existing. When it is remembered, too, how many have been the modifying forces, and how likely it is that several of them may in the course of years have operated one after another upon the same appellations, it will be expected that numerous surnames must not only have drifted far away from their originals, but must have been transformed into words having associations widely removed from those of family nomenclature, and therefore not a little ludicrous when connected with it. To a few of such transformations we have already referred, and by such there can be no doubt many of the drolleries of our surnames have been created. These drolleries—taking them as we find them, without eliminating those whose history is known—are indeed numerous and startling. It is difficult to offer a selection which may give a just notion of their variety, but an attempt to do so shall be made.

We may consider ourselves to be in the domain of registration, and will begin at home. *Registers* are people as well as documents ; *Births*, *Marriages*, and *Deaths* exist not only as facts to be entered and statistically weighed under the Registrar-General's direction, but as born, marriageable, and mortal men and women. *Sexes* are by no means so restricted in number as is popularly supposed. *Boys* (as well as *Boyses*), *Bachelors*, and *Swains* abound, and are matched by plentiful *Girls*, *Lasses*, *Virgins*, and *Damsels*, to whom, however, the former would not always wish to make love. "The conditions of society," indeed, "are so jumbled that a *Babe* may be the mother of a *Widow* ; a *Child* the father of a *Man* ; a *Matron* the spouse of a *Littleboy*. In actual life many *Sucklings* have grayer heads than *Seniors*, many an *Elder* is the junior of a *Younger*, and a host of *Majors* are more infantile than many so-called *Minors*."¹ But quitting such bewildering paradoxes, we have, in further seeming reference (more or less direct) to the chief conditions and events of human life, the surnames *Born* and

¹ *English Surnames as seen in Groups*, by C. I. Lordan. Houlston & Sons. Original edition, p. 7.

Baby ; *Bride, Mate, Hymen, and Wedlock* ; *Corpse, Coffin, Graves, Mould, Worm, and Dust* ! And again, while, to recall the innocent interests of the nursery, we have *Bunney, Dobbin, Pussey, Doll, and Dadd* ; *Ache, Age, Pain, Weak, and Worry* are also found, to commemorate “the last scene of all, that ends this strange eventful history.”

We are thus led naturally to the woes of existence in general : these are fully represented in family nomenclature. Upon its lists appear many of “disease’s shapes abhorred”—from *Palsey* to *Hiccups*. *Grief* and *Anguish* are not wanting. They are usually associated with the county of Norfolk, but unfortunately are not unknown beyond the limits of that shire. *Want* and *Fever* may be found in Kent. It is well that the same county produces *Crusts* and *Shillings*, and that *Physick* is also forthcoming—probably at no great distance. *Fright*, again, has a footing on Kentish ground, while *Fears* are frequent in Somersetshire. Luckily, *Hope* is generally distributed.

It is discouraging to learn how freely bad characters are scattered up and down the country. *Bragg, Mock, and Gammon* are found in Gower ; *Cant* flourishes in many places, for example at Bath. This is bad enough, but at Crickhowell and elsewhere human *Brutes* and *Furys* may be met with. The black page, however, has its *per contra*. On the opposite side appear *Worth* and *Virtue*. There is *Good* to set against *Evill* ; *Reason* to neutralise *Rant* ; *Kindly* to balance *Heartless* ; *Pluck* to pair with *Coward*. *Fustices*, moreover, are ever at hand to redress all wrong, while *Saws* enough—wise ones, we may hope—and plenty of modern *Instances* exist for their equipment. The worst titles, again, may, so far as half the community is concerned, actually give place to the best. By the gentle agency of matrimony a *Quarrell* might any day be changed into a *Peace* ; a *Tippler* be unhesitatingly acknowledged as *Steady* ; a *Cheater* become permanently *Upright*.

The human body in its several parts and tissues—from *Head* to *Foot*, from *Marrow* to *Skin*—contributes to the name-list. That, too, which sustains “this mortal frame” is appropriately found there, as *Curry* and *Rice, Chicken* and *Ham, Lamb* and *Pease*. To complete the feast, *Liquor* is provided, *Sherry, Champagne, Claret, and Port*. Nor need the outer man’s requirements be left unfurnished amidst the resources of this gigantic nominal store. *Raiment* does not lack there ; *Vest, Hose, and Jacket* are seen upon its catalogue ; and for those who seek more decorative objects of attire, *Plume, Ruffle, and Lace*.

The ranks, offices, and occupations of mankind are necessarily

represented in the denominational list—from *Rex* to *Scullion* and *Tinker*, from *Pope* and *Cardinal* to *Beadle* and *Sexton*. But it must not be supposed that *everything* that seems to fall into this class of surnames by right belongs to it, although its members are more frequently genuine than are those of most other classes here referred to.

Passing from man and man's downwards through life of lower phase, we find upon the name-roll beasts in abundance, from *Lion* to *Mouse*; birds, from *Eagle* to *Wren*; fishes, from *Whale* to *Spratt*. Insects also figure on the list—*Moth*, *Wasp*, and *Spider*. By the instrumentality already mentioned, a human *Grubb* may at any time become a *Butterfly*.

The vegetable world and the mineral do not fail to enlarge the expansive catalogue of titles which registration furnishes. From it we learn that all around us *Oaks* and *Elms* ramify; *Daisys*, *Violets*, and *Snowdrops* blossom and fade; *Oranges*, *Plums*, and *Pears* ripen and fall to mother earth. *Onion* and *Garlick* too spring up in the name-garden; *Weed* and *Nettle* intrude upon its boundaries. *Stone* and *Mudd* are found mingling in the cognominal soil with *Gold*, *Silver*, *Pewter*, *Copper*, and *Zinc*.

Land and *Water*, again, diversify the view which name-registration displays—from *Mountain* to *Hillock*, from *Sea* even to *Puddle*; and if *Storm* and *Mist* arise upon the prospect to suggest the disturbance and obscurity which are wont to wait on mortal existence, the symbol and promise of something calmer and clearer appears there too, and many a *Rainbow* cheers the firmament of surnames.

These are a few of the oddities of family nomenclature. It need scarcely be said that interpretations, when they can be given, frequently demolish the strangeness and absurdity of the titles. Thus *Death* is a name of the local class, being *D'Aeth*—that is, *from Aeth* in Flanders; *Babe* is likely to be a metronymic, from Barbara; *Wedlock* is probably *Whitlock*—a nick-name for a fairhaired person; the *Cants* “are but the descendants of the old ‘Margaret le Coynte,’ or ‘Richard le Queynte,’ from the early French ‘coint,’ neat, elegant;”¹ *Tippler* is a respectable trade-name, which formerly denoted merely a seller of liquor; *Rice* is the old Keltic personal name *Rhys* (most familiar now in the form of *Rees*), which, with the patronymic prefix of Wales, has given us Price, Preece, Bryce, Breeze, &c.; *Pear* is neither more nor less than *Pierre*, the saint-name on which several family denominations—as Pearce, Spiers, and Pearson—have been founded; *Water*, again, is merely *Walter*; while *Land* is a surname

¹ Bardsley' *English Surnames*, p. 471.

of the local family, pointing to the launde, lawn, or open sward amidst surrounding forest, upon which the first transmitters of the denomination dwelt. These examples will suffice to show how remote often is the true from the seeming meaning of the name.

It would be a hazardous enterprise if a general attempt were made to restore family appellations to their pristine shape ; but every member of the community might and should know at least the surname borne by his father, and be able, whatever corruption it may have undergone in the past, to hand it on to his children without further alteration. This, perhaps, may be expected to follow when the provisions for elementary education now in force have told upon the adult population. Out of 364,164 persons who were married in 1879, 58,641—viz. 25,037 men and 33,604 women—signed the registers *by mark*. It is undoubtedly among this defaulting 58,000, and those whom they represent, that most cognominal uncertainties arise. When they have been taught to write, a main source of denominational corruption and of unmeaning increase in surnames will have been dried up. Surnames will still in all probability continue to multiply ; but they will multiply much less than at present, and from causes whose interest and significance will be in no wise lessened by the fact that ignorance of one of the first things that should be known is no longer among them.

EDWARD WHITAKER.

WHAT BECAME OF CROMWELL?

“ Mizraim cures wounds, and Pharaoh is sold for balsams.”

Sir Thomas Browne.

DEATH, like Life, has its history, and man often terminates his strange vicissitudes on earth only to enter on other vicissitudes still stranger in the grave. We wonder no one has ever undertaken the posthumous memoirs of the great. What a lively volume it would be!—how startling its paradoxes, how fine its irony, how pointed its antitheses! Write it with a pen of lead on leaves of opium, and it would glow with eloquence; indite in the most mournful of styles, and it would blaze with wit. It would be a carnival of extremes—Addison and Joe Miller talking in the same breath, Rabelais and St. Paul bawling each other down. Fortune has cracked many a good joke in her time, but death’s jokes are better. They are a little coarse, perhaps, occasionally—a little too broad for a nice taste; but they are meant, doubt it not, kindly. Wages are so high, that we cannot well afford, even when things are prospering with us, to keep, like the Roman consuls, a *mementote mortalem esse* in our triumphal chariots. At our feasts we omit the skeleton. But for all that we are mortal, and let us hear the Antic’s philippics. We can hear them gratis.

When Hamlet let his wit run riot among the tombs, he could get no further than imagining that Alexander the Great might stop a beer-barrel, or imperial Cæsar patch a wall to keep out the wind. Bah! ’twas a foolish speculation. Hamlet was no antiquary; he ought to have known that they were both burnt to snuff. But why need we go to fiction? Let Death preach his sermon from fact, and moralists have their fling at pride fairly. What was the fate of great Talbot—Shakespeare’s victorious Talbot—the scourge of France, the hero of Crotoi and Pontoise? A few years ago, some alterations were being made in the parish church at Whitchurch, in Shropshire; the tomb of Talbot was opened. On a careful examination of the skull—we borrow the narrative of one who was present at the exhumation—the cranium was found to be filled with a fibrous substance, which was supposed at first to be some preservative herb inserted when the

bones were wrapped in their cerements for the purpose of embalming, but which afterwards turned out to be neither more nor less than a mouse's nest, from the centre of which the bodies of three small mice were extracted. In short, the brain of the doughty general who had struck terror into the squadrons of Joan of Arc had become the procreant cradle of a family of church mice, and the fatal gash which had terminated his life furnished the means of ingress and egress to these strange intruders in "ambition's airy hall." What was the fate of Richelieu? His skeleton was dug up from its grave in the church of the Sorbonne, kicked about the streets, and decapitated. A grocer—mark that!—filched away the skull, kept it comfortably till his marriage, when, his wife being afraid of it, he sold it—the considerate husband!—to one Armez, who, anxious to turn it into money, offered it for sale to the Duc de Richelieu, who *wouldn't have it at any price*. What was the fate of Turenne—"the godlike," "the thunderbolt of war"? His remains were also exhumed, and were on the point of being flung into a pit, when a savant, struck with the fresh appearance of the bones, and thinking that the devastator of the Palatinate was too perfectly articulated to be thrown away, begged the skeleton for the National Academy of Anatomy. So he, who in life taught Marlborough the art of war, served in death to teach medical scapegraces the construction of the human frame. Was not the author of "Paradise Lost" dismembered by a crew of drunken revellers, "one possessing himself of a piece of the jaw, another of a fragment of the occiput"? Did not a "select body of medical gentlemen," with the skull of the mighty Dean of St. Patrick's grinning before them on the table, express "very lively dissatisfaction at its formation"? And is there not "only too much reason to believe" that the head of him who gave us the "Essay on Man" and the "Rape of the Lock" has been travelling about England in the possession of an "itinerant phrenologist"? Food enough for reflection here!—and would you, reader, find food for more, go and moralise whither we could lead you. In the heart of the city, girt round with squalor, stands, mean and sombre, a little church.¹ There you may hold in your hand the head of him who was once the father of Lady Jane Grey, once one of the proudest of England's proudest nobles. There, perfectly preserved, is the head of Henry, Duke of Suffolk. The lines which the cares of three centuries and a half ago ploughed on the features may still be traced; still may the physiognomist read the lineaments of that austere, stubborn, and crafty politician. The dent of the false blow which the headsman first dealt is there in all its ghastly distinct-

¹ The Church of Holy Trinity in the Minories.

ness; and there, frightfully stereotyped, is the death-agony which convulsed that face when the headsman's work was done. Those were the eyes—the very cornea are preserved—which had gazed on Jane as she hung with Ascham over the Phædo.

But whither are we straying? Our business is a grave antiquarian dissertation.

What became of Cromwell's body after death? has, as everybody knows, been a vexed question from the times of the Restoration to the present day; and, as we are not acquainted with any satisfactory solution of the problem, we propose to devote a few pages to discussing it. The question will admit of three distinct divisions. Firstly, was he ever buried in Westminster Abbey at all? Secondly, if he was buried there, what became of his body when it was exhumed and conveyed to the Red Lion Inn, in Holborn? Thirdly, if it ever left the Red Lion Inn, what became of it after hanging at Tyburn?

Now, there can be no doubt at all that there was a very general impression that his body never left Whitehall for Somerset House; that its supposed lying-in-state at Somerset House and its subsequent interment in the Abbey was a mere mockery. Let us examine the facts. Cromwell died on Friday, September 3, at three o'clock in the afternoon. He was then embalmed. That is certain. "This afternoon," says the "Public Intelligencer" for September 4, 1658, "the physicians and cherurgians appointed by order of the Council to embowel and embalm the body of his late Highness, and fill the same with sweet odours, performed their duty." All the authorities, without a single exception, agree that he was embalmed; but Heath observes, in his "Flagellum," that the body was in such a state that the embalming was only partially performed, and Noble tells us that it was wrapped up in a sheet of lead; consequently it was not exposed to view for long after death—a circumstance which the "Public Intelligencer" also notices. It remained, or was supposed to remain, at Whitehall till the twenty-sixth of September, when it was conveyed, "about ten of the clock at night," to Somerset House. There it lay in state, and was shortly afterwards interred in Westminster Abbey. Now, it is noticeable that, after a few hours subsequent to death, the corpse itself was never seen. And here begin our difficulties. Most of the authorities agree in stating that the body was privately interred shortly after death; consequently the alleged removal to Somerset House was a deception. This, indeed, is all but certain; for besides the evidence of Heath, who says that an empty coffin was despatched to Somerset House,—evidence which is not of very much value,—we have

the evidence of Bates, Cromwell's private physician, that the state of the body necessitated its interment before the solemnity of the funeral. And such also is the account of Noble. We may, therefore, safely conclude that the magnificent funeral of Cromwell, on which Cowley expended so much eloquence, was a mock pageant, though the crowd which witnessed it had no such suspicion. And now comes the question, Where was he interred?

Heath, whose political prejudices frequently get the better of his reason, complacently informs his readers that "divers rumours were spread at the time that the body was carried away in the tempest the day before by the Prince of Darkness," and is evidently nettled that he cannot prove this satisfactory theory. According to Oldmixon, his body was wrapped in lead and "sunk in the deepest part of the Thames, two of his near relations undertaking to do it;" and an anonymous pamphleteer adds, that it was just below Greenwich. A common opinion at the Restoration was that the corpse was taken to Windsor and put into King Charles's coffin, while that of the murdered king was substituted for Cromwell's; Cromwell, they said, knowing that, if a reaction set in after his death in favour of the Stuarts, his body would be dug up and insulted. This theory was, however, refuted by the exhumation of Charles I. in the presence of George IV. and Sir Henry Halford in 1813,—having had, indeed, no evidence to support it. Others say that his body was removed to Newburgh Hall, in the North Riding of Yorkshire; and there they still show a place called Cromwell's Vault. Newburgh Hall was the family seat of the Fauconbergs, and Cromwell's third daughter, Mary, was the second wife of Thomas, Viscount Fauconberg; but why this place should have been particularly selected for the interment of the Protector does not appear. According to another tradition, it was removed to Narborough, a place about twenty-five miles from Huntingdon, and for this tradition there is some evidence worth reviewing. About the year 1818 the rector of Narborough was a Mr. William Marshall. To this Mr. Marshall a very curious anecdote was communicated by Mr. Oliver Cromwell, of Cheshunt, the great-grandson of Richard Cromwell's son, Henry. Mr. Oliver Cromwell's mother lived to the great age of 103, and she told her son that when a young girl she was well acquainted with Richard Cromwell, and had often talked with one of his servants. This servant assured her, she said, that he recollected the hearse which conveyed the remains of the Protector passing through Cheshunt at night, and that he, then a lad, went on with the post-horses which drew the hearse as far as Huntingdon, whence he was sent back with the horses. This story

must, of course, be taken for what it is worth. It is just possible (but it is by no means probable) that Cromwell, fearing posthumous outrage, may have wished to lie beside his parents in the family grave. There, were his resting-place unsuspected, he would at least be safe from sacrilegious hands. But, would such a secret have been likely to have been kept? and how came a mere boy to know what that hearse contained? A secret divulged thus far would undoubtedly have gone further, and it is certain that no tradition about the Protector's interment at Huntingdon was current at the time. The story that it was buried at Narborough, a town twenty-five miles beyond Huntingdon, is a legend so utterly devoid of foundation that it would be absurd to pay the slightest attention to it. It is indeed difficult to account for its origin.

We now come to a very remarkable narrative; and could we be satisfied of the veracity of the witness, and allow his solemn assurances to weigh against the intrinsic improbability of his statement, the problem of Cromwell's last resting-place would be solved. Among the reports current at the Restoration, one of the most popular was that the body of the Protector had been, by his own orders, buried on the field of Naseby. This report took several forms. The truth of it was confidently insisted on in London, and was implicitly believed by the people about Naseby. At last the son of Barkstead, the regicide, came forward. He was, he said, prepared to assert on oath the truth of what he said. He put forth an advertisement that he frequented Richard's Coffee-house, within Temple Bar, where he was ready to answer any questions which might be put to him. The account he gave is to be found in the second volume of the "*Harleian Miscellany*," and this account we will transcribe:

"At midnight the dead body, being first embalmed and wrapped in a leaden coffin, was in a hearse conveyed to the said field, Mr. Barkstead himself attending, by order of his father, close to the hearse. That being come to the field, they found about the middle of it a grave dug about nine feet deep, with the green sod carefully laid on one side, and the mound on the other, in which the coffin being put the grave was instantly filled up and the green sod laid exactly flat upon it, care being taken that the surplus mould should be clear removed. That soon after the like care was taken that the ground should be ploughed up, and that it was sowed successively with corn."

Here, then, we have a definite statement, made by a man in a highly respectable position, who could have had no conceivable motive for lying. Those who had the opportunity of cross-examining

him appear to have been satisfied of his honesty, and he was not, so far as we can judge of him, a man given either to frivolity or to romancing. To disbelieve his story is to charge the narrator with deliberate and circumstantial falsehood. We are certainly not inclined to accept his statement without much misgiving, but we think it within the bounds of possibility that the plough of the peasant may some day corroborate the honesty of this strange deponent. We shall see presently that the evidence for the identification of the body at its disinterment rests on testimony far less conclusive ; and we may also observe, in comparing the story with the others, that Barkstead is the only witness who could not have been mistaken, but who must have lied. The evidence of the others is based on information more or less indirect and presumptive ; the evidence of Barkstead is direct and definite. Now, there can be no doubt that for some months before his death the mind of the Protector was unhinged and morbid, that he anticipated a reaction in favour of the exiled House ; and he must have been well aware that in the event of the Stuarts returning, his bones would not escape insult. There can be no doubt that his body was buried somewhere in the strictest privacy long before the public funeral. It is equally certain that we have no account either of the date or of the spot where that private interment took place, and that the secret must have been known only to very few, for there was at the time no suspicion that the public funeral was a mock ceremony. Wherever, therefore, the remains were laid, they were smuggled away, and it was of course as easy to transfer them in a hearse or a carriage to any part of England, as it was to bury them secretly in the Abbey. If we are to be guided merely by probabilities, we should of course reject all the narratives which have been cited, and conclude that the Protector was laid privately under the pavement of Westminster Abbey at or near the place where the empty coffin was lowered on the day of the public funeral. To sum up, therefore, the first part of our inquiry, whether Cromwell was actually interred in the Abbey is at least doubtful ; the presumptive evidence is strong, but it is by no means either conclusive or satisfactory. It is supported by the testimony of no eye-witness. It is affirmed only by those who supposed that the coffin which was on the day of the public funeral lowered into the vault contained the body of the Protector ; when we now know, on the testimony of Dr. Bates, that the body had been buried privately long before.

And now let us proceed. On the 8th of December, 1660, a vote passed the House of Commons that the bodies of Cromwell, Ireton,

and Bradshaw should be exhumed, and hung on the common gallows at Tyburn. Accordingly, on Saturday, January 26th, the Serjeant of the House of Commons proceeded to the Abbey with a body of attendants. The masons went to work, and of what ensued we have two accounts, neither of which is of such a character as to place it beyond suspicion. Both of them, it will be observed, describe the body as lying in the state coffin which was deposited in the vault on the day of the public funeral—the coffin which we now know to have been merely for show, and never to have contained the body at all. Let us hear Noble :—

“ They found, in a vault at the east end of the middle aisle, a magnificent coffin, which contained the body of Oliver, upon whose breast was a copper plate, double gilt, which upon one side had the arms of the Commonwealth impaling those of the deceased, and upon the reverse this inscription.” Then follows the Latin inscription which was on the coffin that lay in state at Somerset House.

The other account was handed down by tradition from the high sheriff of Middlesex, who superintended the work. He found, he said, the body of Oliver Cromwell, which was hid in the wall of Westminster Abbey, “and, when discovered, was with great difficulty got at, the body being first wrapped in a sheet of lead, and afterwards put into a wooden coffin, and another wooden one, and so on for about half a dozen, cement being poured between each to make it secure ; several pick-axes were broken before the workmen could get their ends ; but at length, after much labour and toil, they came to the sheet of lead which enclosed the body.” There is, however, one piece of evidence not without weight, and that is the evidence of one Sainthill, a Spanish merchant, who has, in a manuscript quoted by Noble, observed that the head of the Protector was “in green cerecloth, very fresh embalmed,” which certainly corroborates what we know from other sources, that the body was partially embalmed. The mason’s receipt for the fees received by him for his odious task is, we believe, still in existence. Is this, then, sufficient evidence to satisfy us that the body thus exhumed was the body of Cromwell? We say emphatically, No. In the first place, there is the difficulty about the coffin. In the second place, we have no official corroboration of this narrative. It was very much against the interests of those employed in this work to confess themselves baffled ; it was much more likely that they would, in the event of their not discovering the object of their search, have substituted some other body in its place. If Cromwell was not buried in the state coffin—and unless he was placed there subsequently to his previous interment, he was

not—it would be extremely difficult to identify his remains. It is, indeed, true that when the body was exposed, it was popularly supposed to be that of the Protector ; but with regard to the skull, we must remember that it was invariably covered with a thick coating of pitch before it was exposed ; and had the exhuming party been conscious of any fraud, they would obviously have taken every precaution to conceal it. But however this may be, certain it is that some corpse, genuine or supposititious, was, with those of Ireton and Bradshaw, conveyed from the Abbey to the Red Lion Inn, in Holborn. This was on Monday, January 28th ; where it remained during the Sunday does not appear. Assuming, then, that the corpse of Cromwell was really conveyed to the Red Lion, the question now arises, did it ever leave the Red Lion for Tyburn, or was some other corpse substituted in its place by Cromwell's partisans ? It is, of course, quite conceivable that the officers in charge of the remains might have been amenable to a bribe ; and it is very probable that such an attempt was made.

It was made, we are told, and not only made, but carried out, by a person named Ebenezer Heathcote, an apothecary in Red Lion Square. This man was a zealous republican, and had married the daughter of one of Ireton's commissaries. The tale goes that he gained access to those who kept watch over the corpse,—who appear, we may add, to have been a drunken and dissolute set,—got possession of the body, smuggled it away, and buried it privately at midnight in the centre of Red Lion Square, then as now an open space, the exact spot of the interment being just under the place at present occupied by the summer-house. This strange story, in itself less improbable than any of the others, unfortunately rests on no good authority. We find no mention of it in any contemporary documents ; it appears to have been disseminated in much later times : a circumstance which its advocates might of course attribute to the fidelity with which the secret was preserved. It would be difficult, if not impossible, to confute it, and it contributes to perplex still further this mysterious historical enigma.

Now let us bring forward the evidence for the conveyance of the bodies to Tyburn. The most graphic and circumstantial account is undoubtedly that given in the "*Mercurius Politicus*" for January 30, 1660. "On Monday night, Cromwell, Bradshaw, and Ireton, in two several carts, were drawn to Holborn from Westminster, where they were digged up on Saturday last. To-day they were drawn upon sledges to Tyburn; all the way, as before from Westminster, the universal outcry and curses of the people went along with them.

When these three carcasses were at Tyburn, they were pulled out of their coffins and hanged at the several angles of that triple tree, where they hung till the sun was set. After which they were taken down, their heads cut off, and their loathsome trunks thrown into a deep hole under the gallows. The heads of those three notorious regicides, Oliver Cromwell, John Bradshaw, and Henry Ireton were set upon poles at the top of Westminster Hall." To this effect, also, the author of "*Short Meditations on Oliver Cromwell*:" "But the corpse of him whose aspiring mind could never be satisfied, hath now no other tomb but a turf under Tyburn." Among those who witnessed this shameful spectacle were good Mrs. Pepys and her friend Lady Batten, as we learn from Pepys' Diary for January 30th. Such, according to general opinion, was the ignominious resting-place of the body of Cromwell. And here for a moment we may pause to notice the absence of all conclusive proof of identification. The whole business seems to have been transacted with incredible carelessness and irregularity. Of the character of the people to whose guardianship the remains were entrusted we have already spoken. Official testimony there is none, medical testimony there is none. The identification of a corpse is, as every coroner knows, often a matter of considerable difficulty, even under the most favourable circumstances. The identification of a corpse two years after its interment, even when decomposition has been arrested, requires nice technical discrimination. It was, as we said before, the object of the exhuming party to persuade their employers that Cromwell's body had been found. It would not, indeed, be too much to presume that, in the event of a search being unsuccessful, the royalists would themselves have connived at fraud. Their object was, not merely to insult the memory of an adversary, but to brand with infamy the memory of rebellion, to give the people a terrible warning by a terrible example. Would a drunken and turbulent rabble be likely to be critical? Who is curious when on fire with passion? and what passion burns more fiercely than party passion in a mob? Had a doubt crossed the mind, who would have cared or dared to express it? A sordid rout on its way to have a kick at Sejanus is neither scrupulous nor observant. There were, we know, many people who confidently believed that the body which swung on the gibbet at Tyburn was not the body of the Protector; and as soon as it was safe to express their belief, they expressed it. When Barkstead came forward with his strange story, the witness which might have confuted him was still festering on the spikes at Westminster. There were many people living who could have placed it beyond doubt that the

head there was the head of the Protector, but they were silent. Again, is it credible that the sons and daughters of Cromwell, who were, we know, devotedly attached to him, would have allowed the head of their father to remain gibbeted for twenty-five years, without making any effort to rescue it? It is surely more natural to attribute their indifference to the fact that they knew it was not there. We have not ventured to express our belief in any of the stories we have cited touching the burial-places of the Protector, but there can be no doubt at all that there has been, among the various branches of the Cromwell family, a tradition to the effect that he was never buried in the Abbey. He may possibly have bound his wife, his children, and the friends whom it was necessary to take into his confidence, to secrecy. That secret has probably never been divulged, though the depositaries of it may at the painful crisis of 1660 have thought themselves justified in assuring his relatives that his body was safe from sacrilegious hands, and beyond possibility of outrage. This would account, not only for the existence of the tradition, but for the various discrepancies in detail ; and it would account, above all, for the apathy of his kindred subsequent to the exhumation.

We will now resume our narrative—a narrative to which, from this point, as will be seen from what we have just said, we are not inclined to attach much credit. The bodies, we are told, hung a whole day; they were then cut down and decapitated. The trunks were buried at the foot of the gallows ; the heads, or rather the skulls, were covered with pitch, stuck on poles, and conveyed to Westminster Hall. They were there fixed in a ghastly row. “Went into the hall, and there saw my Lord Treasurer and also saw the heads of Cromwell, Bradshaw, and Ireton,” Pepys enters in his diary, February 5, 1661. Here, by the way, we have a curious piece of evidence to deal with. We have already noticed Sainthill’s remark about Cromwell’s head being “very fresh embalmed.” He saw the skull, it seems, on the spikes at Westminster, and the fact that it was an embalmed skull seems at first to be strong evidence in favour of that skull being the skull of Cromwell. The statement is, however, difficult to reconcile, first, with the fact that the skulls were plastered with pitch ; and, secondly, that the head of Cromwell was so disfigured that many took it for the head of Charles the First. Had it been fresh embalmed, it is singular that no other spectator should have noticed the circumstance, and no other spectator has noticed it. It is clear also that Sainthill could never have been near enough to inspect it closely, unless, indeed, he had an opportunity of examining it previous to its impalement ; and this does not appear to have been the

When these three carcasses were at Tyburn, they were pulled out of their coffins and hanged at the several angles of that triple tree, where they hung till the sun was set. After which they were taken down, their heads cut off, and their loathsome trunks thrown into a deep hole under the gallows. The heads of those three notorious regicides, Oliver Cromwell, John Bradshaw, and Henry Ireton were set upon poles at the top of Westminster Hall." To this effect, also, the author of "*Short Meditations on Oliver Cromwell*:" "But the corpse of him whose aspiring mind could never be satisfied, hath now no other tomb but a turf under Tyburn." Among those who witnessed this shameful spectacle were good Mrs. Pepys and her friend Lady Batten, as we learn from Pepys' Diary for January 30th. Such, according to general opinion, was the ignominious resting-place of the body of Cromwell. And here for a moment we may pause to notice the absence of all conclusive proof of identification. The whole business seems to have been transacted with incredible carelessness and irregularity. Of the character of the people to whose guardianship the remains were entrusted we have already spoken. Official testimony there is none, medical testimony there is none. The identification of a corpse is, as every coroner knows, often a matter of considerable difficulty, even under the most favourable circumstances. The identification of a corpse two years after its interment, even when decomposition has been arrested, requires nice technical discrimination. It was, as we said before, the object of the exhuming party to persuade their employers that Cromwell's body had been found. It would not, indeed, be too much to presume that, in the event of a search being unsuccessful, the royalists would themselves have connived at fraud. Their object was, not merely to insult the memory of an adversary, but to brand with infamy the memory of rebellion, to give the people a terrible warning by a terrible example. Would a drunken and turbulent rabble be likely to be critical? Who is curious when on fire with passion? and what passion burns more fiercely than party passion in a mob? Had a doubt crossed the mind, who would have cared or dared to express it? A sordid rout on its way to have a kick at Sejanus is neither scrupulous nor observant. There were, we know, many people who confidently believed that the body which swung on the gibbet at Tyburn was not the body of the Protector; and as soon as it was safe to express their belief, they expressed it. When Barkstead came forward with his strange story, the witness which might have confuted him was still festering on the spikes at Westminster. There were many people living who could have placed it beyond doubt that the

The evidence on which the earlier part of this story rests would not, we fear, bear minute investigation. There is, in the first place, no authority whatever, except mere hearsay, for the story of the sentinel. If the Government issued a proclamation for the recovery of the skull, some record of that proclamation would undoubtedly remain, but no trace of that proclamation has been discovered. Between the abduction by the sentinel and the transmission to the Russels its history is a blank. Another skull may, with a view to a negotiation with the Cromwell family, have been in the interval easily substituted in place of that originally stolen. It would, moreover, as a writer in *Notes and Queries* well observes, be absurd to suppose that any head which had for nearly twenty years been exposed to such an atmosphere as ours, could possibly be so perfectly preserved as the head in Mr. Wilkinson's possession. We say nothing about several minor difficulties,—that, for example, presented by the existence of the other skull purporting to be that of Cromwell in the Ashmolean Museum at Oxford ; and the discrepancy presented by the fact that, according to one version of the legend, the soldier picked up the head, not at Westminster, but at Temple Bar. The strongest evidence in favour of Mr. Wilkinson is the evidence of Flaxman, who was minutely acquainted with all the memorials of Cromwell's features which art has left us, and who was therefore eminently qualified to give an opinion. But in these cases internal evidence is of comparatively little value unless corroborated by evidence from without, and the testimony of facts is on this occasion not merely deficient, but contradictory. At every step in this strange problem we are confronted with insuperable difficulties. There is no proof that Cromwell was ever buried in the Abbey at all. If the burial be assumed, there is no proof that the body exhumed in 1660 was his body. If the burial and the exhumation be assumed, there is no proof that his corpse left the Red Lion for Tyburn. Assuming these three facts, as well as the story of the sentinel, there is no proof that the head purloined by him was identical with the head sold to the Russels.

And we are glad to think so. We should be sorry to imagine that common hands could maul and palter with a relic so sacred—it is a sacrilege almost too horrible to realise. Rather let us hope—and there are good reasons for hoping—that as his immortal part lives for ever in the memory of a grateful people, so his mortal part has long since mingled with the mould.

SIR OLIVER SURFACE.

“**B**ARTLEMY FAIR,” to cite its popular title, was long a sort of London carnival celebrated in Smithfield annually at Bartholomew Tide. It was of old institution ; originally and for centuries it had been the Great Cloth Fair of England ; King Henry the Second is said to have assigned the privilege of holding it to the head of the Priory of St. Bartholomew in Smithfield, while limiting its duration to three days : the eve, the day, and the morrow of the Festival of St. Bartholomew. But the clothiers and woollen drapers presently needed, sought, and found a wider market for the sale of their manufactures. From the time of Elizabeth, the fair, forfeiting its commercial character and dignity, degenerated into a place of revelry, raree-shows, and popular amusements, with booths for the exhibition of monstrosities and the sale of “fairings.” The three days were extended to fourteen ; to be reduced again to three, however, in 1708. The grave Evelyn had passed through the fair, contemplating its “celebrated follies.” The gayer diarist, Pepys, was a frequent visitor. At the fair in Smithfield he found “the best dancing on the rope that ever he had seen in his life ;” he made purchases of sundry “combs for his wife to give her maids ;” and he noted the presence of my Lady Castlemaine at the puppet-show of “Patient Grizill,” with “the street full of people expecting her coming out.”

To certain of the players Bartholomew Tide, with its London fair, was very welcome. The month of August had arrived ; the doors of the patent theatres were closed ; the actors who were not strolling the provinces had too much time upon their hands. It was usual for the more popular comedians—apparently the tragedians were less active in the matter—to open booths or temporary theatres in the neighbourhood of the fair. Estcourt and Pinkethman, the favourite comic actors of Queen Anne’s time, found much profit from their enterprise as theatrical managers in Smithfield. Joe Miller, too, famous for that Jest Book which, bearing his name, was in truth the work of another hand ; and the player, Henry Norris, admirably known as “Jubilee Dickey,” from his performance of the character

of Dickey in Farquhar's "Constant Couple ; or, a Trip to the Jubilee," were joint proprietors of a booth open at the Hartshorn Inn, near Pie Corner. At these temporary theatres the entertainments were, without doubt, of a coarse sort enough : the comedians of the time easily declined into buffoonery and horseplay, to suit the grosser taste of their patrons. At Miller's booth, "Over against the Cross Daggers," it may be noted that the entertainment sometime consisted of a "droll," entitled "The Tempest, or the Distressed Lovers ; with the Comical Humours of the Enchanted Scotchman or Jockey, and the Three Witches," which must have been a complex travestie of two of Shakespeare's plays.

Still, the appearance of an actor as a Bartholomew Fair manager was a proof of his popularity ; and when the comedian RICHARD YATES became the proprietor of a booth in Smithfield, with Ned Shuter as his rival or partner, it is not clear which, the fact fully testified to his fame as a player, or to his favour with, at any rate, the galleries of his time. He seemed to take rank as a worthy successor of Pinkethman, Hippisley, Bullock, Griffin, Miller, and the rest. But not less amusing than these as a comedian, it is probable that he was a superior artist, that his histrionic manner boasted something more of refinement and subtlety. The comic actors were long in foregoing the licence of the clowns of the Elizabethan stage, the disposition to "gag" and grimace, to descend without scruple to all kinds of droll excesses, whatever "necessary question of the play" there might be to be considered ; and from vice of this kind Yates's acting was not altogether free. But assuredly he was less reproachable than his predecessors. He succeeded not merely in farce, but also in sterling comedy. He shone in a variety of Shakespearian characters : as the clowns of "Measure for Measure," "The Winter's Tale," "Twelfth Night," and "All's Well that Ends Well ;" as Pistol, Sir Hugh Evans, Roderigo, Autolycus, Trinculo, Grumio, Shallow, Malvolio, Touchstone, Launce, Bottom, Lucio, Cloten, Dogberry ; and he even ventured to appear as Shylock and Falstaff. He was accepted, too, as an excellent representative of the worthy citizens, the honest merchants, and respectable elderly gentlemen of the stage. Among these has to be counted Sheridan's SIR OLIVER SURFACE, of which character Richard Yates was the first personator. It was held to be one of the best of his assumptions.

Of his early life, little is known. He was born early in the eighteenth century, and made his first appearance upon the London stage at the Haymarket in 1736. He sustained the two characters of

Lord Place and Law in Fielding's dramatic satire of "Pasquin"; but it seems that on the eleventh night of performance he resigned the first of these parts to Mrs. Charlotte Charke, the very eccentric daughter of Colley Cibber. "As he had other parts in the piece," the lady writes in the narrative of her life, "Mr. Fielding begged the favour of him to spare that to make room for me, and I was accordingly engaged at four guineas per week." A season later, and Yates was undertaking very subordinate characters at Covent Garden. Davies, in his *Miscellanies*, 1784, notes that Yates, then "by the general voice allowed to be the first comedian of the age," had, forty-five years before, in the tragedy of "Richard the Second," appeared as the anonymous attendant who, at the king's bidding, brings a looking-glass upon the stage. He also figured as Wart, one of Falstaff's ragged recruits, and as the character known as the "Mad Welchman" in the play of "The Pilgrim." He was emboldened, however, at the end of the season, to take a benefit,—or rather, the fourth part of one; for Mrs. Elmy, the actress, and "two others," as the playbills stated, shared in the proceeds,—when he personated Sir Joseph Wittol in Congreve's "Old Bachelor," a character left open to him by the retirement of Joe Miller, in whose possession it had long remained.

In 1739 Yates transferred his services to Drury Lane, figuring as Pantaloon in a pantomime called "Harlequin Shipwrecked," as Gripus in "Amphitryon," Quaint in "Æsop," Dapper in "The Alchemist," and Jeremy in "Love for Love." In the following year he was a member of the Goodman's Fields company, his performances being assisted by the presence of his first wife, an actress of minor note. He sustained a great variety of characters, and for his benefit announced that he would attempt the character of Lovegold in "The Miser," "after the manner of the late Mr. Griffin," while he apologised for not waiting on the ladies and gentlemen of the neighbourhood to solicit their patronage, "as he was not acquainted with that part of the town." He supported Garrick's performances in comedy at the Goodman's Fields theatre, playing Petulant to his Witwoud, Don Lewis to his Clodio, Major Rakish to his Master Johnny in "The Schoolboy," &c.; and when Garrick quitted the East for the West end of London, and accepted an engagement to appear at Drury Lane Theatre, Yates accompanied him. With Garrick, indeed, Yates had been associated from the first; he was wont to relate that he had been a member of the Ipswich company when Garrick, with a blackened face and assuming the name of Lyddal, made his first essay upon the stage as Aboan, in the play of "Oroonoko." From 1742 until the close of the season of

1766-7, indeed, Yates continued to be a member of the Drury Lane company. In 1756 he became the husband of an actress who, as Mrs. Graham, had for two seasons played with marked success in tragedy. As Mrs. Yates she acquired a still larger measure of fame, taking high rank among the finest of English performers. She was, Davies notes, "an actress whose just elocution, noble manner, warm passion, and majestic deportment had excited the admiration of foreigners and fixed the affection and applause of her own countrymen." Romney had pictured her as the muse of tragedy some time before it occurred to Reynolds to portray Mrs. Siddons in the same character. To comedy she was, no doubt, unequal; her Lady Townley was described as "merely a fifth-act lady;" she succeeded only in the serious scene at the close of the play. The "Dramatic Censor" of 1770 held that her fine person, regular but haughty features, and powerful voice carried her well through rage and disdain, but that she was "deficient in the tender feelings, and hurried the forcible ones to too great a degree of violence." Desdemona and Monimia, it was judged, were not suited to her; her Imogen had great merit, but lacked "an essential innocence"; her Calista, if deficient in the pathetic parts, yet happily conveyed the pride and violence of the character. She was great as Lady Macbeth, Constance, Mandane; her Medea was unrivalled; her Jane Shore was only equalled by Mrs. Siddons; her Margaret of Anjou displayed extraordinary power.

With both Mr. and Mrs. Yates Churchill dealt very severely in his "Rosciad," 1761. Of the lady he wrote :—

Might figure give a title unto fame,
What rival should with Yates dispute her claim?
But justice may not partial trophies raise,
Nor sink the actress in the woman's praise.
Still hand in hand her words and actions go,
And the heart feels more than the features show:
For, through the regions of that beauteous face,
We no variety of passion trace;
Dead to the soft emotions of the heart,
No kindred softness can those eyes impart;
The brow, still fixed in Sorrow's sullen frame,
Void of distinction, marks all parts the same.

Yates is described in even harsher terms; but, no doubt, the defects of his histrionic manner are accurately noted :—

Lo, Yates! Without the least finesse of art,
He gets applause—I wish he'd get his part.
When hot Impatience is in full career,
How vilely "Hark'e! Hark'e!" grates the ear.

When active Fancy from the brain is sent,
And stands on tip-toe for some wished event,
I hate those careless blunders which recall
Suspended sense, and prove it fiction all.

In characters of low and vulgar mould,
When nature's coarsest features we behold,
When, destitute of ev'ry decent grace,
Unmannered jests are blurted in your face,
Then Yates with justice strict attention draws,
Acts truly from himself and gains applause.
But when to please himself or charm his wife,
He aims at something in politer life ;
When, blindly thwarting nature's stubborn plan,
He treads the stage by way of gentleman,
The clown who no one touch of breeding knows
Looks like Tom Errand dressed in Clincher's clothes.
Fond of his dress, fond of his person grown,
Laughed at by all, and to himself unknown,
From side to side he struts, he smiles, he prates,
And seems to wonder what's become of Yates !

This was humorous enough, especially to the lookers-on ; Yates judged it to be malignant beyond measure.

The "Rosciad" fell like an explosive shell among the players. As one of them confessed, "they ran about the town like so many stricken deer." Their consternation was only surpassed by their wrath. It was a sort of comfort to them to find that so many of them had been attacked, that they suffered gregariously, that so few had been spared. Even Garrick, it was said, was too full of terror at the avalanche that had fallen in his neighbourhood, to rejoice very greatly at his own escape. Revenge was much talked of : there was a proposition to inflict personal chastisement upon the satirist. But Churchill's physical proportions had a deterring effect even upon the most violently inclined. It was told of Yates that, seated in the parlour of the "Rose Tavern," he snatched up a case-knife in a very menacing manner when he perceived the figure of his censor darkening the entrance ; but the formidable aspect of the stalwart, brawny, "clumsy Curate of Clapham," as Foote called him, had its due effect ; the actor quietly laid down his weapon and abandoned all thought of avenging himself by means of assault and battery, cutting or wounding. He was careful, however, to demonstrate upon the stage his contempt for his critic by repeating in a marked manner the words "Hark'e ! Hark'e !" to which Churchill had called attention. This was his manner of showing how much or how little he felt the attack upon him. Davies has stated that Churchill had detected almost the only fault with which Yates was chargeable : an

occasional defect of memory ; “to hide this, he would sometimes repeat a sentence two or three times over.” It may be gathered, however, from Hugh Kelly’s “Thespis,” published five years later than the “Rosciad,” that Yates’s hesitancy of speech was for the most part simply due to nervousness and excess of anxiety :—

When a new part unhappily he plays,
A thousand doubts perplex him and amaze ;
Fast from himself he tremblingly retires,
Nor trusts that worth which all the world admires ;
But on a sea of causeless terror tost,
Allows both mind and memory to be lost.

And the general merits of the actor are strongly insisted upon in the lines :—

Yates with high rank for ever must be placed,
Who blends such strict propriety with taste ;
From nature’s fount so regularly draws,
And never seeks to trick us of applause.
Mark, when he plays, no vacancy of face,
No wandering eye or ignorant grimace,
Is rudely suffered once to intervene,
Or check the growing business of a scene ;
Nay, in his silence, happily employed,
He looks continual meaning on the void ;
Bids every glance with character be fraught,
And swells each muscle with a burst of thought.

And this good opinion, however tumidly expressed, is confirmed by the notice of the actor in a later poem, “The Theatres,” 1772 : —

We ne’er have seen, and haply never may,
A more correct or chaste performer play
Than Yates ; who, in his proper style,
A cynic of some laughter must beguile ;
Without one gleam of paltry, trickful art,
By nature led, he glides upon the heart ;
Traces the path where judgment strikes a line,
And justly scorns by low finesse to shine, &c.

Other critics, writing in prose, applauded Yates for his “humour, propriety, and close adherence to nature,” for his efforts in low comedy, and for his portraits of old men. He was pronounced “a very just comedian, seldom beholden to trick for applause ;” “a useful and pleasing performer, with a particular turn for low humour ;” the only actor then on the stage possessed of “a just notion of Shakespeare’s fools,” “and dressing his parts with singular propriety.”

At the close of the season of 1766–7 Mr. and Mrs. Yates quitted

Drury Lane and accepted an engagement at Covent Garden Theatre. Messrs. Harris, Rutherford, Colman, and Powell had become the purchasers of its patent, and were resolved upon a vigorous campaign. Both actor and actress had become a little weary of Garrick's management, and the temptation of an increased salary was not to be resisted. Garrick supplied Mrs. Yates's place by engaging Mrs. Dancer, who afterwards became known as Mrs. Spranger Barry and as Mrs. Crawford. Mr. and Mrs. Yates remained at Covent Garden until the end of the season of 1771-2. During the two following seasons they appear to have been absent from London. In 1775 Garrick sought again the assistance of his old playfellows, and wrote to Mrs. Yates: "In all dealings, the plain and simple truth is the best policy. As Mrs. Barry is in treaty with another theatre, it is natural for me to wish a treaty with another lady, and it is as natural that my inclinations look towards you. If you have no objections to enter into a treaty with me, be pleased to name your time and place, and I shall be as punctual as I ought to be to so fine a woman and so good an actress." The lady replied: "On considering every circumstance of my situation and my novelty, to say nothing of my beauty, I think I cannot in conscience take less than £700 a year for my salary; for my clothes, as I love to be well dressed, and the characters I appear in require it, I expect £200." She was disinclined to take a benefit, although Dickey, as she called her husband, "considered only the main chance, and was of a different opinion." She added: "But I am clear, the worst advice a woman can possibly follow is that of her husband, and I had much rather you should determine that point for me than he." She was engaged for two years at a salary of £800 a year, and a benefit upon the usual terms; it being agreed that she should provide all her own clothes at her own expense for all characters in tragedy and comedy. Yates was offered an engagement upon a salary of £12 per week and a benefit. It now began to be said that Yates secured engagements rather in right of his wife's merits and attractions than because of his own.

It was Garrick's fate to be frequently upon rather angry terms with his company; and no doubt he was called upon to endure very capricious and inconsiderate and even dishonest treatment. In October 1775 he addressed a letter of strong expostulation to Mr. Yates concerning his wife's conduct. "Do you and Mrs. Yates imagine," he asked, "that the proprietors will submit to this manner of going on, or that they will pay such a large sum of money for having their business so destroyed as it was the greater part of the

last season, and has been wholly this, by waiting for Mrs. Yates's pleasure to perform? She played but thirty times last season, and as she goes on in the proportion of four times in six weeks, she will play twenty times in this season. Indeed, Mr. Yates, this will not do, and I give you fair notice. We lost greatly by her not playing the first night she was advertised, and to this day no reason could be given for the disappointment, nor did you offer any to my brother, but that you could not help it and you did all in your power to oblige her to act. . . . I shall not submit to this very unaccountable and unreasonable behaviour." She had asked for comedy parts, to save her the fatigue of always appearing in tragedy. Mr. Yates, on her behalf, had mentioned Araminta in "The School for Lovers," and Hippolita in "She Would and She Would Not." But when these parts were offered her she declined them, because she would not be so indelicate as to take them from the lady who was in the habit of playing them. Yet she demanded the part of Belinda in "All in the Wrong," although she knew it had been long in the possession of a capital actress; while she refused to resume her original character of Widow Sprightley in "The Discovery," which had been specially revived for the entertainment of Queen Charlotte. Garrick concluded: "To finish this business at once, and that we may be more explicit, it is my greatest pleasure to live in the greatest harmony with my capital performers, and more particularly so with Mr. and Mrs. Yates. But if they persist to distress us, and Mrs. Yates is resolved to withdraw herself so often, and sometimes without a cause, I shall be obliged to do what I would most wish to avoid." This vague threat may have effected some good. There was further difficulty, however, a little later, when the actress refused to reappear as Almeria, the heroine of Congreve's "Mourning Bride," because the part was now "unfit" for her, and because, with Garrick's consent, she had abandoned it fourteen years before. Garrick was urgent, however, that she should reappear as Almeria. She had, it seems, voluntarily undertaken the part not long before, on the occasion of the benefit of Mr. Cautherley. Garrick wrote: "At the time of the benefits last year, hearing how much the plays suffered by the performers taking parts 'for one night only,' I put up an order in the green-room that the manager would expect every performer to do for the house what they should do for the benefits, and for this good reason: why is not the public at large to be as well entertained as the friends of any single actor? and why are not the proprietors to be profited by the performance of Mrs. Yates as Almeria, as well as Mr. Cautherley?" In conclusion, he entreated her compliance, while

reminding her that in such a case no forfeit could be accepted. She consented, but not very gracefully. "It is hard," she wrote, "to be governed by laws of which one is ignorant. This is the first time I ever heard of your order in respect to benefits, which will make me a little more cautious for the future. With regard to Almeria, I think it is a part unworthy of a capital actress ; the table of forfeits is clearly in my favour, nor can I accept of the character as *mine*. But if my playing it a few nights will oblige you, I am ready to do it. I cannot help concluding with a few lines from your favourite author :—

Oh, 'tis excellent
To have a giant's strength, &c. &c."

It may be noted that it fell to Mrs. Yates, as the leading actress of the theatre, to deliver in 1779, from the stage of Drury Lane, Sheridan's monody upon the death of Garrick.

Sir Oliver Surface was, with one exception, the last new character undertaken by Yates. During the seasons of 1780–1 and 1781–2 he did not perform in London. In December 1782, he reappeared at Covent Garden, after an absence from that stage of ten years' duration. In 1783, on the production of Cumberland's prose tragedy of "The Mysterious Husband," he appeared as the first representative of Sir Edmund Travers—it was the last new part he was required to sustain. He acted, as John Taylor states in his "Records of My Life," "in so unaffected a manner, and with such an exact conformity to life, that it was the most perfect delusion I ever beheld on the stage in characters of the familiar drama." Taylor also applauds Yates's excellence as Major Oakley in "The Jealous Wife," a character he was also the first to sustain ; and adds, "but the character he was chiefly celebrated for was Shakespeare's "Launce." It is admitted that he was "not qualified to perform polished characters," while it was claimed for him that he personated "those in middle life with correctness, force, and impressive effect." He is described as "one of those actors who think for themselves, and disregard all traditionary gestures and manners." When he had a new character to play, he endeavoured to find some person whose deportment and disposition resembled it, or he searched his memory for some former model. "He was not so sportive as Parsons, but he was more correct and characteristic." O'Keeffe writes of Yates, in 1763 : "I liked him best in Bottom the Weaver and Launce ; . . . his manner was of the dry or grave humour, but perfectly natural ; his speech slow ; he knew he had his audience, and therefore took them at his leisure. I wished to have had him in some of my early pieces ; but

he was at that time rich and old, and under no necessity to plague himself with studying new parts."

Yates preserved an air of mystery in regard to his age, and as a consequence, perhaps, acquired the reputation of being much older than he really was. At his death, in 1796, he was generally said to be ninety; but this was no doubt an exaggeration. In October 1783 the *Public Advertiser* gave insertion to the following gossiping paragraph: "Dick Yates and his wife have retired from the stage, with a fortune perhaps much larger than any of their predecessors, except Garrick. At the least it may be computed at £36,000 or £40,000. Yates and his wife are also remarkable for the comely appearance with which they bear their age; for the age of these old acquaintances of the public is much greater than is usually thought. From theatrical dates, the one must be seventy, the other sixty years old." Yates wrote an indignant letter of denial, in his own name and on behalf of his wife. They had not retired with £40,000. They had not retired at all. Theatrical dates did not prove them to be the one seventy, the other sixty. As to his own age, he declined to be explicit; but he protested that Mrs. Yates would not be "more than sixty" for a dozen years or more. She had made her first appearance on the stage in 1754, at Drury Lane, in Crisp's tragedy of "Virginia;" and she was then, he proclaimed, "as pretty a plump rosy Hebe as one shall see in a summer's day." She had the honour—an honour never conferred on any other person—of being introduced as a young beginner by a prologue written and spoken by no less a person than Mr. Garrick. Finally, Yates promised that any further such malevolent attacks, should he succeed in discovering their author, he would soundly punish with the help of "a good English oaken towel."

But after the year 1783, the London stage knew little or nothing more of either Mr. or Mrs. Yates. They took no formal leave of their profession, but seemed gradually to fade out of it. In 1786 the "Beaux' Stratagem" was announced at Covent Garden, for the benefit of Matthew Clarke, a respectable comedian of the second class. It was a night of misadventures. Clarke was in a dying state, and, indeed, hardly survived the performance. Yates offered to appear in his stead, and play the part of Scrub. But Yates was suddenly attacked with a violent fit of the gout; it became impossible for him to present himself upon the stage. Scrub was therefore represented by Quick. Mrs. Yates played for the last time in May, 1785, at Drury Lane, when she appeared, "for that night only," as the Duchess in the tragedy of "Braganza," for the benefit of Mrs.

Bellamy, the actress. Seventeen years before there had been a serious difference—even a fierce paper war—between the two ladies. Mrs. Yates, “in consequence of being obliged to perform two arduous characters the preceding and succeeding nights,” had refused to personate Hermione in “*The Distressed Mother*,” on the occasion of Mrs. Bellamy’s benefit, and great had been Mrs. Bellamy’s anger and indignation. Time had brought about concord and charity, however. The unfortunate Mrs. Bellamy, the wreck of her former self, was now incapable of delivering even the poetic address that had been prepared for her. She could only add some few farewell words in prose to the verses Miss Farren recited on her behalf. Earlier in the year Mrs. Yates had fulfilled engagements at Edinburgh and with Tate Wilkinson at York. Wilkinson writes fervently of her inimitable performance of the character of Margaret of Anjou, in Dr. Franklin’s tragedy “*The Earl of Warwick* :” “She played as well that night as any time I had ever seen her; the audience were all gratified in the highest degree.” Yates accompanied his wife, but did not appear upon the stage. He distinguished himself by a judgment which the public speedily reversed: he pronounced Mr. Jordan, then a member of Wilkinson’s company, to be but “a piece of theatrical mediocrity.”

It had been proposed at one time that Mrs. Yates should join Henderson, the tragedian, in giving public readings from Shakespeare, and from other dramatists and poets. The actress could greatly have assisted the actor, it was thought. His readings at the Freemason’s Tavern had been received with extraordinary favour. It was said of him that he had read Cowper’s “*John Gilpin*” into reputation. “The alterations of form, countenance, and sex,” writes Boaden, “would have had great value in the exhibition.” But Henderson died in November 1785, and lies buried in Westminster Abbey. Mrs. Yates, who had for some time suffered severely from dropsy, died at her house in Stafford Row, Pimlico, in May 1787. Her remains were interred in Richmond churchyard, where her father had been buried some years before.

Old as he was, the widower did not consider himself too old to marry again. Of Yates’s third wife, however, little is known. She appeared upon the stage, but this seems to have been after the death of her husband. As his widow, she took a benefit at the Haymarket Theatre, where she sustained the character of Margaret of Anjou, one of the most famous impersonations of the second Mrs. Yates. She is said also to have appeared in “*The Grecian Daughter*” at the Haymarket, and to have performed the part of

Mandane in "Cyrus," for the benefit of Mr. Hull, at Covent Garden. She subsequently accepted engagements at Dublin, where she remained three seasons, and at Liverpool. In 1800, at Drury Lane, Mrs. Yates "from Dublin" represented Angela in "The Castle Spectre." She married a second time, and two years later, as Mrs. Ansell, she appeared at Drury Lane, sustaining the character of the Queen in Hamlet, on the benefit night of Mr. Powell, who, "for that night only," personated Hamlet, with Mrs. Jordan for her Ophelia. A critic of the time described Mrs. Ansell's acting as "spirited, but generally too elaborate." There seems nothing more to be said of the third Mrs. Yates.

Richard Yates died on the 21st April 1796. It was told of him that the day before his death he complained of the ill-usage he had experienced at the hands of the Drury Lane managers: they had refused him an order. "That was unkind, indeed, to so old a servant," it was remarked. "Yes," continued the dying man, "particularly when my admission could have kept no *living* soul out of the house. For I only requested to be buried under the centre of the stage; and they were hard-hearted enough to refuse me!" The Drury Lane built by Holland in 1794, to be totally destroyed by fire in 1809, was not the Drury Lane of Richard Yates's triumphs, however. Peter Cunningham has related that Yates died of "rage and disappointment," in Stafford Row, Pimlico: he had ordered eels for his dinner, but his housekeeper had been unable to obtain them! It is narrated, too, that the actor's great-nephew, a lieutenant in the navy, was a few months later killed by a pistol shot as he endeavoured to effect an entrance into the house from the back garden. He claimed to be entitled to the premises, but one Miss Jones, a rival claimant, with the aid of her friends had obtained possession, and resisted with fatal violence all his endeavours to force an entrance. A trial for murder followed, but the accused were acquitted.

Various other characters of note, in addition to Sir Oliver Surface, Major Oakley, and Sir Edmund Travers, first obtained histrionic life at the hands of Richard Yates. He was the original representative of Vamp in Foote's "Author," of old Honeycombe in Colman's Farce, of Sir John Restless in Murphy's "All in the Wrong," of Sir Bashful Constant in his "Way to Keep Him," of Wingate in his "Apprentice," and of Quidnunc in his "Upholsterer"; of Philip in his farce of "High Life below Stairs," of Sir Benjamin Dove in Cumberland's "Brothers," of Stirling in "The Clandestine Marriage." The list of Yates's characters given by Genest numbers about one hundred and seventy-five.

DUTTON COOK.

THE EVOLUTION OF INSECTS.

WHEN the development of an animal or plant is duly studied, one or two chief aspects of such a subject fail to be considered by the biologist. Either the young organism has been converted directly into the likeness of its parent, or it has assumed the parental form indirectly and through a series of transformations more or less distinctly marked. In other words, the young form has emerged upon the stage of life in the guise of its parent, or it has appeared first in a shape and under an appearance not recognisable as belonging to the race it has sprung from. In the latter case, changes of greater or less extent convert the young being into the likeness of its progenitors ; and when such transformations occur in the life history of an animal or plant, it is said to undergo “metamorphosis.” Every one, for instance, knows that the butterflies of the garden do not emerge from the egg as winged insects, whilst common information is able to assert that they pass through the *larval* or “grub” stage and through the *chrysalis* form before becoming the perfect insects. So, also, the flies begin their life as maggots ; and the bees and beetles, with other insects, exhibit like stages to the butterflies in the course of their development. Furthermore, a frog practically begins life as a fish, breathing first by external and then by internal gills. Sooner or later, however, limbs are developed ; the gills are replaced by lungs ; the tail disappears ; and the tailless condition of the frog race is finally assumed with its emergence upon the land. Insects and frogs—not to speak of other animals, such as crustaceans, whose history has been already discussed in a previous article—are therefore said to undergo “metamorphosis.”

Sundry questions not unnaturally rise in the mind which attentively considers such phenomena in the animal world. Firstly, there is the plain question, “Why do some animals undergo metamorphosis and others not ?” Then, secondly, may be asked, “What is the meaning of metamorphosis ?” or more primarily, “Can any meaning be assigned to this process ?” As we have frequently had occasion to point out, such questions receive no aid or solution from that philosophy which maintains, as an article of unquestioning faith,

that the living belongings of this world came forth fashioned in all their excellence—or, it may be added, in all their frequent and apparent imperfections—at the behest of some sudden creative fiat. There is no need to assume development at all on this hypothesis of things, which for the man of science has been slain long ago, though traces of its influence are not unknown in regions removed from the active currents and tides of culture. On the reverse side of matters stands the theory broadly denominated “evolution,” which, seeing the promise of reading a past and progressive history in the developments which pass in panoramic review before our eyes to-day, asserts that a law of progress has guided and still guides life’s courses and ways. On this theory we can understand why development takes place—namely, because it is a law of life that the progress and growth of the race should be represented in, and carried out through, its individual histories. And we can also conceive why development should run in the grooves marked out so conspicuously in many life histories, such as those of insects and crustaceans. This latter fact is explicable when it is repeated that we see in an animal’s early growth the lines and stages along which the development of its race has passed. By the very idea of evolution we expect variety and change to be represented in the development of living beings; for such change is the one great condition which has made this universe what it is. And agreeing as to the main reasons for development and its ways, we should find little difficulty in comprehending how these ways and paths have been followed. As we have already impressed upon the reader, the picture is not always clearly limned, and its outlines are often meagre enough. Still, what we do see and know of its form, convinces us of the correctness of the broad deductions of evolution, which deductions being scorned and denied, leave the whole course of nature a tissue of inexplicable absurdities.

In the present paper, dealing with the meanings of metamorphosis, we intend to direct attention to certain details which, for lack of space, have been omitted in previous articles, and which, dealing with matters of special interest to the student of evolution, may, logically enough, claim attention in a separate article. Such subjects as the general nature of “metamorphosis,” and how that process is modified by surroundings and other circumstances, as well as the narration of some life histories which illustrate very aptly the general conclusions of evolution, may therefore fitly engage our consideration in the course of our developmental studies. Firstly, then, the general question of “metamorphosis” demands notice. Whilst it is perfectly true that, broadly speaking, only such animals as insects, crustaceans, and frogs—

exhibiting very marked and apparent change of form in passing from the young to the adult stage—may be said to undergo “metamorphosis,” it would be far more logical, because more true, to assert that the histories of all living beings, without exception, illustrate the process in question. For example, there is not, after all, such an immense difference between the development of an insect and that of a fish—or, for that matter, between that of the frog and of man himself—when the facts of development are fairly faced and duly understood. No animal or plant is suddenly transformed into the perfect likeness of its parent. On the contrary, it has not merely to grow, but it has to be formed from that which is formless; to become organised by the development of that which has no structure at all; and to advance along lines of development during which it successively assumes a transient likeness to the forms of other and lower beings. Thus a quadruped, whilst undergoing development within its parent’s body, in reality passes through as strange and startling a metamorphosis as does a frog outside its parent’s body, and external to its egg likewise. A quadruped is really at first like a fish and reptile. So alike are the young of all vertebrates in their early stages, that recognition of the nature of any particular form may be an impossibility. “Metamorphosis” thus occurs in quadrupeds as in frogs; in snails and oysters as in insects. The great and prevailing difference simply exists in the fact that the insect or frog leaves the egg in an imperfectly developed condition and at an early stage of its career, passing the remainder of its development as an independent being. In the quadruped or fish, or in the snail and oyster, on the other hand, the young animal does not quit the parent body or egg at such an early period, but remains within its primitive shelter to undergo its full development—or at any rate to emerge upon the world of active life tolerably well prepared for the struggle of living and being. Even amongst the quadrupeds, as in well-nigh every other group of animals, and as in the plant world likewise, there may be great differences in the degree and stage of perfection at which the young organism is ushered into active or independent existence. No better instance of this could be found than in the case of the kangaroos and their allies, in which, as lower quadrupeds, internal development ceases at a very early period compared with that at which higher quadrupeds are born. The newly born young of a kangaroo, which, when full grown, stands 6 or 7 feet high, measures about one inch in length at birth (Fig. 1), and resembles a little red worm much more nearly than a kangaroo. At birth it is transferred to



FIG. 1.
YOUNG KANGAROO.

the characteristic "pouch" of the mother, wherein for weeks it is protected and nourished by the milk secretion. If we consider the effects of growth on such an organism, we may well feel assured that a "metamorphosis" of very complete kind must be required to transform the imperfect and feeble being just described into the giant quadruped which takes its leap of twenty feet with the utmost ease. So, also, we find in the development of birds well-nigh infinite variety in the stage of perfection at which the young animal is thrown upon its own resources. Of old, naturalists were wont to divide the birds into those which could run about and forage for themselves immediately on leaving the egg, and those which, as mere fledglings, required parental care and attention for a longer or shorter period after bursting the shell. A young chicken is a much more independent being than, say, a thrush; and numerous other comparisons might similarly be instituted, with a like result of showing variations in the development of even the animals of a single class.

It seems, therefore, correct to say that the term "metamorphosis" is one of very considerable latitude, and one admitting, in fact, of no rigid definition at all. At the best its value is merely relative, and those animals may be regarded as really most "metamorphic," so to speak, which leave the egg in an immature state, and which, through circumstances which it is our business to trace in this paper, have to pass through a definite or well-marked set of changes in form, shape, and often of size also, before assuming the likeness of the parental form. If we reflect that every living being springs from a mere speck of protoplasm, devoid of all structure, which we call "germ" or "egg," and which contains the potentialities of becoming what its parent now is; or if we further consider that from this speck of albumen there is developed in a few days, as in the case of the chicken, a creature rejoicing in the possession of a complex system of bone, muscle, sinew, brain, nerve, and sense organs—we may well feel inclined to consider such a transformation and development as thorough an example of "metamorphosis" as, and as a far higher development than, that of the insect which attracts our notice simply because it is more evident to our eyes. Another striking proof that "metamorphosis" must be, after all, a comparative term, lies in a knowledge of the fact insisted on and illustrated in a previous paper—namely, that the eggs of all animals, from sponge to man, pass through the same stages up to and including a given point, at which each group branches off, so to speak, on its own pathway towards adult and specific perfection. Thus, why one animal under-

goes those changes of form we see in the insect, and why another does not, are circumstances—to come to details—depending, firstly, on the size of the egg from which it is developed, and concurrently on the amount of nourishment the egg contains; and, secondly, upon the varying circumstances and surroundings of its life, as well as on the life and history of its race, as temporarily represented by its parent. Thus a large-sized egg, with a big yolk, will, *ceteris paribus*, produce an animal in a higher and more perfect stage of development than a small egg, in which no provision exists for the nutrition of the embryo. So much, indeed, may safely be predicted of the causes which retard or favour an early escape from the egg. In the latter case, of course, let us bear in mind that the young will not resemble the parent animal, and we naturally expect to behold changes of form or “metamorphosis” in its further development, and ere it attains to the parent size and likeness.

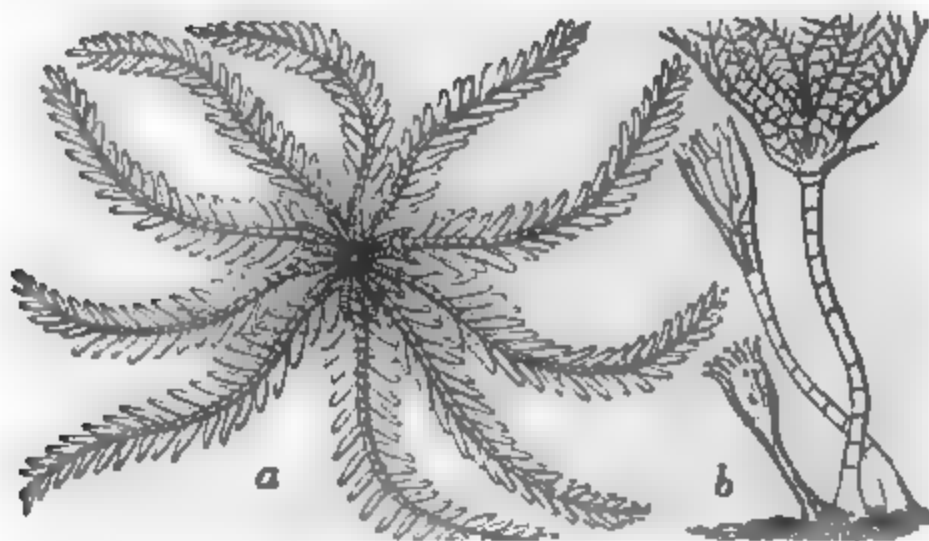


FIG. 2. THE ROSEY FEATHER-STAR'S DEVELOPMENT.
a, adult starfish; b, young stalked forms.

But we must not neglect to note an equally important cause of alteration in form which, acting subsequently to the escape of the immature animal from the egg, will direct its footsteps in different channels, and clothe its form with varied guises. The surroundings of an animal's life necessarily affect that animal, and in time its race, viewing individual and race as consisting each of an adult being and beings. This much is the plainest of plain truths. But it is equally true that surroundings and varying conditions of life must also affect the young stages of animal existence. Even more marked and powerful must be the effect of outward conditions on the young organism, whose frame and constitution, not yet fully formed, are infinitely more plastic and facile than those of the adult. All we know of the effects of environments on living beings teaches us this lesson. We know something of the effects of

heat and cold, of a change of medium, and of numerous other circumstances which materially alter the development of both animals and plants. Natural-history records teem with examples of these facts. A young rosy feather-star (*Antedon*, Fig. 2) may be hurried through its larval state, and may be made to gallop post-haste through its "metamorphosis," if it be supplied with pure sea water. If, on the other hand, such a larva be kept at a low temperature, and in water not frequently changed, and consequently on a more meagre dietary, it will delay in its larval progress. Its development may not merely be greatly protracted and prolonged, but it will attain to a higher stage of independent development than before. So also with many insect larvæ, and so with zoophytes. The effects of varying conditions on the young and developing animal are plainly traceable. It remains for us to discover what light such reflections throw on some well-marked and familiar cases of metamorphosis around us.

The insect world teems with examples of "metamorphosis" at

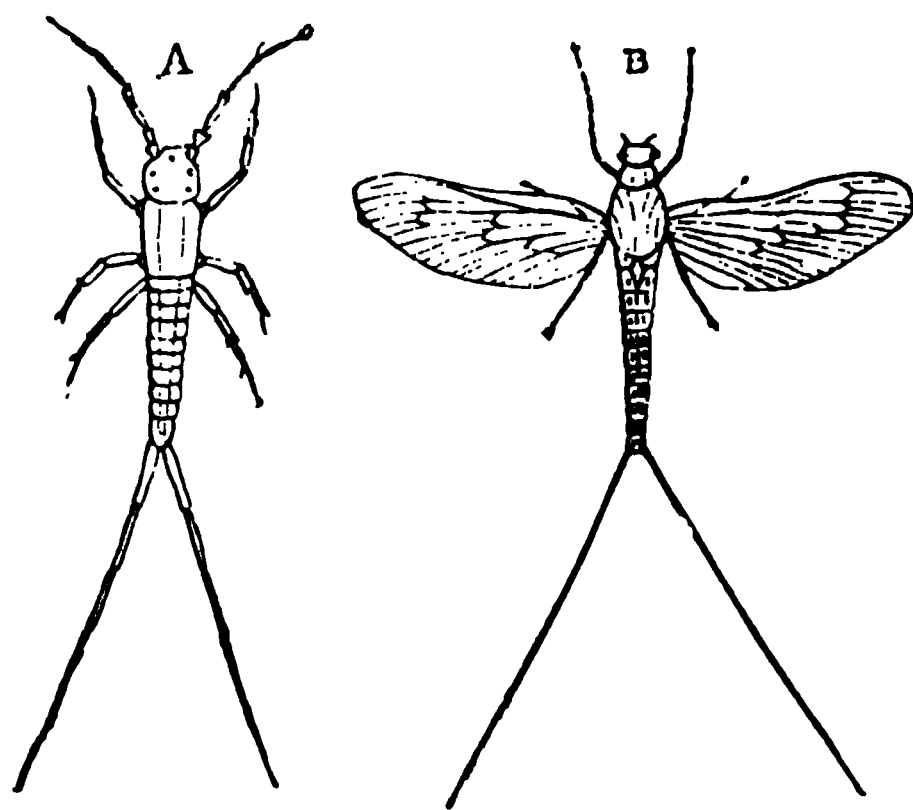


FIG. 3. CHLOËON.
A, larva ; B, perfect insect.

once striking and interesting. It also, however, illustrates a previous remark, that in one and the same class we may find great variations in development and "metamorphosis." For instance, we may find no metamorphosis at all in some insects. The lice, the bird-lice, and the spring-tails (*Thysanura*) thus come

from the egg resembling in every respect, save in size, the perfect insects. They simply cast or shed their skin at each successive stage of growth, but no change of form is represented in their development. So also with many insects of higher rank. A kind of day-fly (*Chloëon*, Fig. 3) is described by Sir John Lubbock as undergoing no fewer than twenty moultings of its skin during its "metamorphosis," which is, however, not of marked or distinct character, since the organs of the young animal are simply and gradually changed into those of the adult insect. Even in insects which undergo a much more typical metamorphosis than the day-flies, the gradual conversion of the larval parts into the

organs of the adult may be witnessed. A young cricket (Fig. 8) becomes the adult very gradually, and the days of its infancy are not markedly separated from those of its youth, nor are these latter in turn sharply defined from the period of adult life. Turning, however, to actual details, we find a butterfly (Fig. 4), fly, and beetle respectively to exhibit the so-called "perfect" form of metamorphosis. Each begins life—that is, comes from the egg, after the preliminary stages common to all eggs—as a grub, caterpillar, or *larva* (*a*), which spends the first part of its existence in the guise of a worm, eating voraciously and increasing, as a rule, many times its original size in bulk. Next this voracious grub settles down and becomes the *chrysalis* or *pupa*. Here quiescence is the order of the day. Sometimes within the larval skin, or it may be (as in butterflies and moths)



FIG. 4. METAMORPHOSIS OF SWALLOW-TAILED BUTTERFLY.
a, larva; *b*, chrysalis; *c*, imago, or perfect insect.

within a special case or cocoon (*b*), the chrysalis passes its existence, which, however quiet and apparently unimportant, externally viewed, is nevertheless marked by a wonderful activity inside. There the elements and nutrient parts of the larva, accumulated during its season of epicurean enjoyment, may be practically broken down, and rebuilt to form the body of the perfect insect, as in some flies, or more gradually changed into the adult organs, as in the butterflies. As Sir John Lubbock succinctly puts it, "the change from the caterpillar to the chrysalis, and from this to the butterfly, is in reality less rapid than might at first sight be supposed; the internal organs are metamorphosed very gradually, and even the sudden and striking

change in external form (from the chrysalis to the perfect insect) is very deceptive, consisting merely of a throwing-off of the outer skin—the drawing aside, as it were, of a curtain, and the revelation of a form which, far from being new, has been in preparation for days, sometimes even for months.”

In the metamorphosis of certain of the flies—*e.g.* the flesh-flies—the changes are in reality much more sweeping than in the butterflies, although perhaps less apparent than in these brilliant members of the class. The body of the maggot or larval fly contains, when it leaves the egg, a number of curious rounded structures named *imaginal discs*. Some twelve of these are placed in the young insect's chest-region four in each segment—and two are situated in the front part of the maggot's body. No change is perceptible in these discs during the caterpillar or larval stage of the fly's life ; but when the maggot encloses itself within the last of its skins, which serves it as a chrysalis case or cocoon, the discs begin to undergo a marked development. Each of the lowest discs placed in the insect's chest develops a leg and half of the segment of the body bearing the leg. The upper discs of the joint give origin to the upper halves of the segment and to the wings or their representatives ; and the two foremost discs are responsible for the development of the head and mouth parts of the perfect fly.

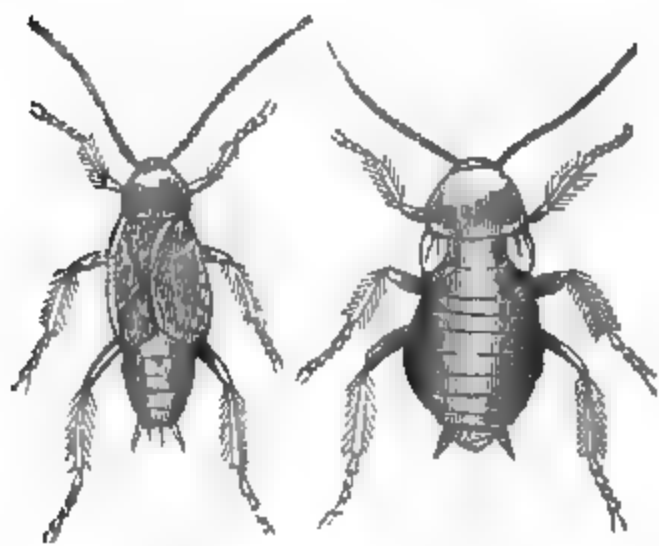


FIG. 3. COLLETES.

(The left hand figure represents the male ; the female, with rudimentary wings, is represented on the right)

As development proceeds, we find a complete physiological break-down of the chest and head organs of the maggot to be represented. A literally new creature (as to chest and head) is produced and built up from the imaginal discs ; the tail or abdomen of the fly consisting, however, of a mere extension and growth of that of the maggot. There is thus witnessed in the development of the fly a much more

complete series of changes than in the metamorphosis of a butterfly, and this notwithstanding the fact that the changes undergone by the latter appear to be of more sweeping character than those exhibited by the former insect. Let us bear in mind also the fact, already noted, that the developmental changes in insects may be reduced to a minimum,

in respect that many lower insects do not undergo any metamorphosis at all. Even in the cockroach (Fig. 5)—belonging to the *Orthoptera*, or grasshopper and locust group—an insect familiar enough to warrant its special mention in the present instance, the young possess eyes, feelers, jaws, and legs before they are hatched. They further leave the egg as minute but active insects, whose organs are really moulded upon the type of those which the perfect cockroach possesses. The young insect then undergoes seven moultings or changes of skin. Its first moult occurs when it leaves the egg, and its second takes place about a month afterwards. This second moult being performed, no further shedding of skin takes place until a year afterwards; and as but an annual moult subsequently occurs, the insect does not attain maturity till its fifth summer. Thus, in the cockroach, “metamorphosis,” in the sense in which that term is used as regards the butterfly, does not occur at all. The male insect, it is true, develops wings at a late stage of development, but there is no chrysalis-stage and no quiescence, as in the butterfly or beetle.

How, then, it may be asked, are the differences between the metamorphoses of insects to be accounted for? On the theory that the development of the individual recapitulates the evolution of the race, it may be asked, do not the facts and differences of metamorphosis in insects seem to present very grave difficulties? There is not that general likeness seen, for instance, in the young of different crustaceans, nor the similarity in development witnessed in the echinoderms or starfish group. These apparent difficulties, however, become greatly lessened, or may disappear entirely, if we bear in mind the fact, already insisted on, that as adult animals vary and alter, and so evolve new species, so the young and developing forms are even more subject to modification whilst in the process of growth. In other words, let us clearly understand that the changes an animal or plant may undergo are two in number. Firstly, there are *developmental* changes, or those we have been tracing in previous papers, which belong to the animal as part of its inheritance, and which cause it to travel along the line of its ancestry towards the likeness of its parent. Then there are, secondly, changes which must be named *adaptive*; which arise from the operation of surrounding circumstances—heat, cold, food, &c.—and from the action upon the living being of external forces. These latter are changes “adapting” it to, it may be, new ways and walks of life, differing from those of its parents and ancestors, and remodelling its frame in a novel guise. The young insect, in truth, may be described as living between two sets of forces or conditions. One set may be named “centripetal,” or centre-seeking, for want of a more descrip-

tive term. These are developmental changes which tie it to its type and which cause it to travel along the beaten track of its race. Then there are the "centrifugal" or adaptive forces, which tend to make its development erratic, which may cause it to fly off at a tangent, so to speak, from its normal way of growth, and which necessarily cause it to differ materially from its type and race. Says Darwin, in speaking of development at large : "Many insects, and especially certain crustaceans, show us what wonderful changes of structure can be effected during development." A little later he proceeds to remark that, whilst similar organs in the young of different animals "often have no direct relation to their conditions of existence" (e.g. the gill arches of a quadruped, a bird, a frog, and a fish), the case is "different when an animal, during any part of its embryonic career, is active and has to provide for itself. The period of activity," says Darwin, "may come on earlier or later in life ; but whenever it comes on, the adaptation of the larva to its conditions of life is just as perfect and as beautiful as in the adult animal. In how important a manner this has acted, has recently been well shown by Sir J. Lubbock in his remarks on the close similarity of the larvæ of some insects belonging to very different orders, and on the dissimilarity of the larvæ of other insects within the same order, according to their habits of life. Owing to such adaptations," continues Mr. Darwin, "the similarity of the larvæ of allied animals is sometimes greatly obscured, especially when there is a division of labour during the different stages of development, as when the same larva has during one stage to search for food and during another stage has to search for a place of attachment. Cases can even be given of the larvæ of allied species, or groups of species, differing more from each other than do the adults."

Now, these are weighty words, because they sum up the reasons why, admitting a general similarity of early development in insects, we should find so much variety in the later development we name "metamorphosis." They direct our attention to the fact that adult life is not the only period when changes in the constitution and form of the living being occur ; and they emphasise very clearly the further fact that to changes occurring in the young stages of an animal are due many of the most characteristic and curious details of animal form and growth. If we wish for examples of unlike larvæ of insects belonging to the same order, we may find any number of such instances amongst the beetles. Some beetle larvæ are footless grubs ; others are well provided with legs ; some have feelers, others want feelers ; and variations in form are very numerous indeed. Or

among the *Neuroptera*, an order including the dragon-flies (Fig. 6), day-flies, white ants or termites, and a host of other insects, the larvæ differ somewhat ; but the pupæ or chrysalides are exceedingly varied, some being quiescent, others active, and others again being at first motionless and afterwards moving about. It is not difficult, moreover, to show how very perfectly adapted to varied ways of life different larvæ have become.

The worm-like form of those larvæ which live parasitically in the interior of other animals, or in plants, may attract our notice as an adaptive feature. Such forms are well represented in the young of the bot-flies, which pass their

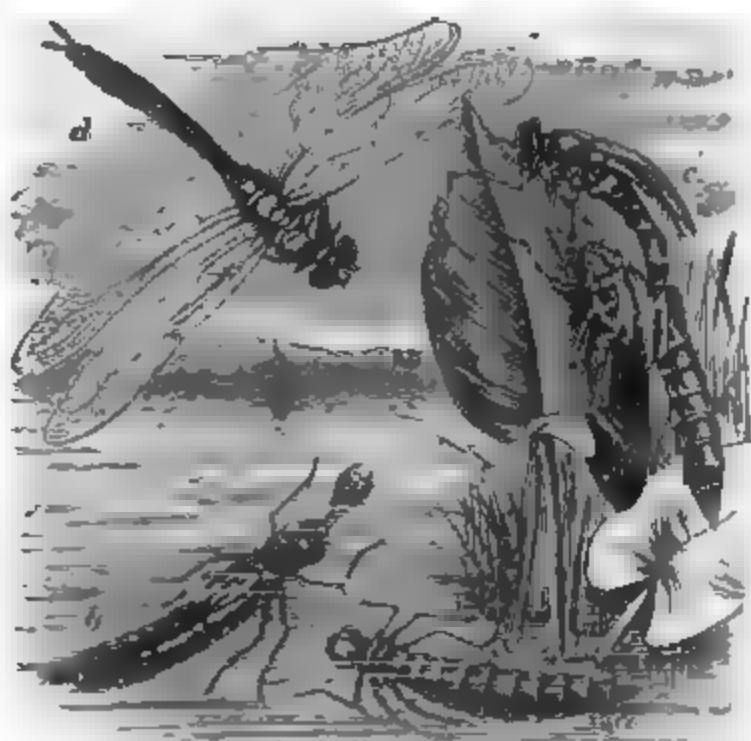


FIG. 6. DRAGON-FLY AND ITS METAMORPHOSIS.
a, larva ; b, pupa ; c, d, perfect insects.

existence either within the digestive system of the horse or within the tumours they form on the backs of cattle. Witness, on the other hand, the strong-jawed, weak-legged larvæ which burrow in wood ; or the well-developed legs of those which feed on leaves or have to forage for animal matter. Compare with these features, again, the degradation and modification causing those larvæ which are fed by parents or " nurses " (e.g. young ants and bees) in the cells of their hives, to become fleshy, footless, inactive grubs ; whilst, as a feature of highest interest, it may be noted that the bee grubs do possess at one period of development rudiments of legs, which, however, soon disappear. The fact, as Sir J. Lubbock remarks, " seems to show, not, indeed, that the larvæ of bees were ever hexapod (or six-legged), but that bees are descended from ancestors which had hexapod larvæ, and that the present apod (or footless) condition of these larvæ is not original, but results from their mode of life." The changes which have converted bee larvæ into footless grubs are, in other words, not developmental, but adaptive.

To follow out in detail the full history of insect metamorphosis would be a task lying far beyond the scope or limits of the present paper, in which other details of varied developments have yet to be

noted. The key-note of metamorphosis, and its explanation, is struck when the great fact of modification of the young, as well as of the adult, becomes patent to us. Anything which may be said further regarding metamorphosis is in reality an enlargement and illustration of this thought. But we may, nevertheless, glance briefly at one or two points in connection with the history of insects by way of rendering clear the probable lines along which the production and evolution of metamorphosis has taken place. We have seen that the changes in form which an insect undergoes have reference, not so much to its future form or adult state, as to its wants and to the exigencies of its life when undergoing development; and we have noted likewise that the insect, like every other animal, is developed and exists between two sets of conditions—namely, those which tend to keep it in its ancestral grooves, and those which tend to alter its constitution through the influence of new surroundings. Insects are known, further, to pass through every gradation of development from slight change, limited to the moulting of the skin, to that which is illustrated by the dissolution of the larval body and the rebuilding of its frame to form the adult. Is there any information at hand, it may next be asked, which affords us any clue as to the original stock from which the insect type, in all its fulness and variety of form, has been derived? Assuming it to be a probable and consistent view of the case that the mere metamorphosis of insects is a matter which, as already explained, is adaptive and secondary rather than original, what of the parent stock? and what does the study of metamorphosis, closely viewed, teach us concerning that root form? How is it, we may lawfully enquire, that such characteristic features of an insect as its wings and its mouth-parts were evolved?

It may facilitate our comprehension of these matters if we firstly begin with wings and mouth, and finally direct attention to the probable origin of insects as a whole. There are two main types of mouth in insects—one illustrated by the butterflies and moths, in which all the organs are modified to serve as a suctorial apparatus for drinking up the nectar of flowers; and the other, typically represented in the beetles, where we find a high development of jaws adapted for mastication and prehension. Intermediate between the suctorial and the biting mouth, we find that of the bees and wasps, where jaws coexist with a tongue or proboscis. It may be said, however, that there is but one type of insect mouth, all the forms of this apparatus being merely modifications of the one type form. Very curious, however, are some of the changes which the mouth-parts undergo in the course of their development. For example, a caterpillar begins life as a biting

insect, and is provided with powerful jaws—a fact which its ravages on leaves fully endorse. Ultimately, as the butterfly, its mouth is wholly suctorial, its chief organ being the long *antlia*, or *proboscis*, used for drinking up the flower juices, and in reality corresponding with the second pair of jaws in a beetle. There is a clear aid to our thoughts on this matter when we discover that the varied mouths of insects are thus all really built up on one type. Our difficulty, therefore, is not that of accounting for the origin of new structures, so much as that of saying how one phase of an organ becomes modelled to form another phase of the same type. An acquaintance with the broad facts of natural-history study reveals modifications quite as wonderful in other groups of living beings. It is even more curious to find the arm of man, the wing of the bird, the fore leg of the horse, and the wing of the bat built up on the same type, than to discover a change of type in one and the same insect's mouth in the course of development. If we go back to insects in which the mouth-parts are simple and possess jaws of elementary pattern, we may as readily conceive of these jaws becoming altered to form suctorial organs, as of the same type of limb being modified in one case to walk and in another to fly. The alteration of ways of life and living, and changes in food, would be sufficient causes for the modification which, proceeding slowly and gradually, would in time become naturally repeated in the life history of the race. Or, further, as Sir John Lubbock suggests, the young insect might have access to, or even be compelled to eat, different kinds of food at different periods of its existence. Every variation of mouth has a reference, like the form of larva, to the life and food of its possessor. Is there, after all, any great difficulty in conceiving that the varying forces and conditions which include in their work the production of very different larvæ in even a single group of insects, should have likewise altered and transformed the mouth-parts of these animals? In truth, alteration of mouth is simply a part of a transformation which becomes the more wonderful as our view of its scope enlarges. Nor does the consideration of the origin of the insect mouth fail to lead us incidentally to discuss the meaning of the pupa or chrysalis stage. "Granting, then," says Sir John Lubbock, in speaking of the modification of the biting to form the suctorial mouth, "the transition from the one condition to the other, this would no doubt take place contemporaneously with a change of skin. At such times we know that, even when there is no change in form, the softness of the organs temporarily precludes the insect from feeding for a time, as, for instance, in the case of caterpillars. If, however, any considerable change were evolved, this

period of fasting must be prolonged, and would lead to the existence of a third condition, that of the pupa, intermediate between the other two. Since the acquisition of wings is a more conspicuous change than any relating to the mouth, we are apt to associate with it the

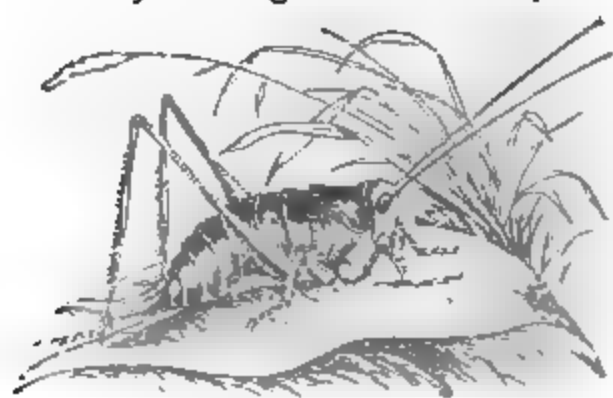


FIG. 7. GRASSHOPPER.

existence of a pupa state ; but the case of the Orthoptera (cricket, Fig. 8, or grasshoppers, Fig. 7, &c.) is sufficient proof that the development of wings is perfectly compatible with permanent activity ; the necessity for prolonged rest is in reality much more intimately connected with the change in

the constitution of the mouth, although in many cases, no doubt, this is accompanied by changes in the legs and in the internal organisation." The same authority expresses the opinion that, whilst the

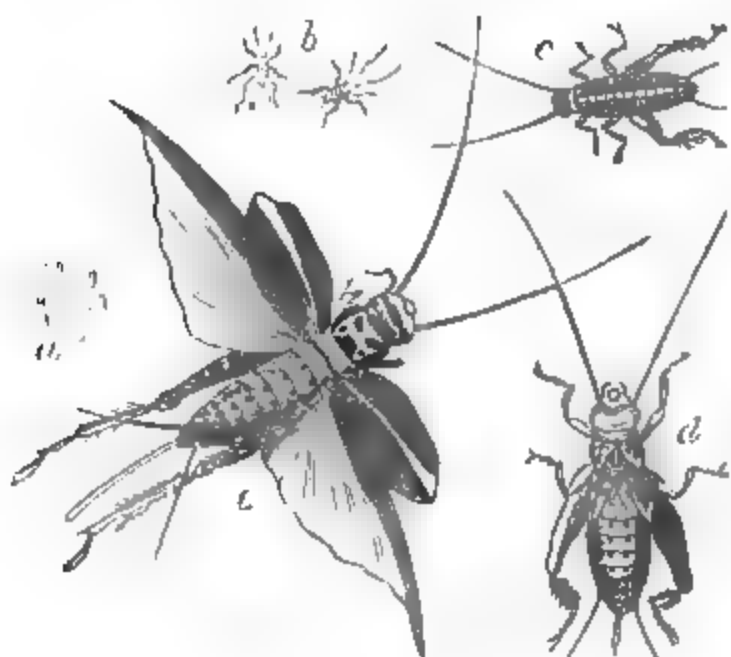


FIG. 8. CRICKET.
eggs, *b*, larvæ (natural size); *c*, magnified; *d*, chrysalis;
e, perfect insect.

biting mouth can be modified to form the suctional—a change witnessed in every developing moth and butterfly—the originally biting mouth of the beetle could not have been directly modified, contrariwise, to form a sucking apparatus, "because the intermediate stages would necessarily be injurious." More probable is it that both types have sprung from some more primary form of mouth, which, partak-

ing of the character of neither, has been therefore capable of modification in either direction, "by gradual change, without loss of utility." That such a form of mouth, united to a body of equally convenient primitiveness, is to be found still represented in the ranks of living insects, we shall shortly discover. Meanwhile the question of wings awaits a brief notice.

The nature of an insect's wing, discussed in reply to the question "What is it?" throws some light on the question of its origin. The

physiology or use of a wing is, of course, to serve as an organ of flight. But the use or function of an organ may be, and often is, a secondary and adaptive matter, and may be very far from revealing the original condition of the structure in question. Authority in matters entomological assures us that the wings, as appendages of the insect's body, are in reality parts of the animal's breathing system. They contain branches of the breathing tubes, and expansions of the blood-vessels likewise. "Hence," says Packard, "the aëration of the blood is carried on in the wings, and thus they serve the double purpose of lungs and organs of flight." But we must note that many insects are absolutely wingless. The lice, spring-tails, fleas, and even the plant lice (Fig. 9) and neuter ants (Fig. 10, *c*), belonging

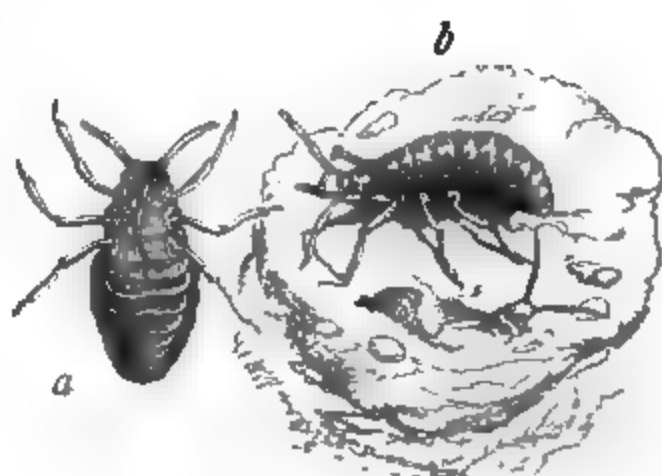


FIG. 9. PLANT LICE.
a, wingless insect; *b*, wingless insect.

to winged groups, are destitute of these organs. No doubt the wingless condition in the latter cases is to be explained on the theory of disuse causing the disappearance of these organs. But the most primitive insects are without wings, and we may, therefore, reasonably conclude that wings are not original belongings but late developments of the race. Furthermore, many insects of relatively high rank, such as the crickets, grasshoppers, &c., quit the egg without wings, and this although they are extremely active in every respect. A wingless state is on all grounds, including the evidence of development, to be regarded as the original condition of the insect class. We have seen the intimate connection which exists between the wings and the breathing of insects. Of the two functions, breathing is, of course,

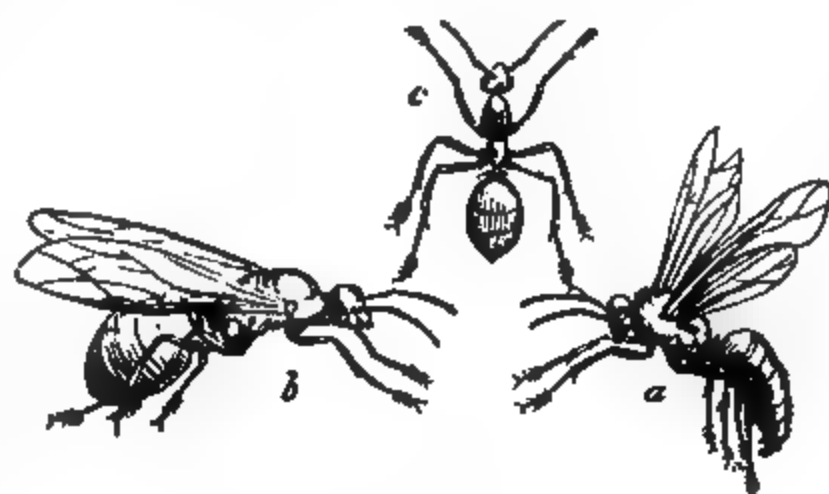


FIG. 10. RED ANTS.
a, male, and *b*, female (both winged); *c*, neuter.

much more primary and essential to life than flight. Hence we may well conclude that as many insects, especially the most primitive, breathe and live without wings, whilst others develop wings and utilise them for breathing as well as for flight, the breathing function, and not that of flying, was the first use to which the earliest insect wings were put. The first beginnings of wings probably existed as we see the thin skin-folds of the water-living young (Fig. 11) of some insects to exist to-day—that is, as primitive organs

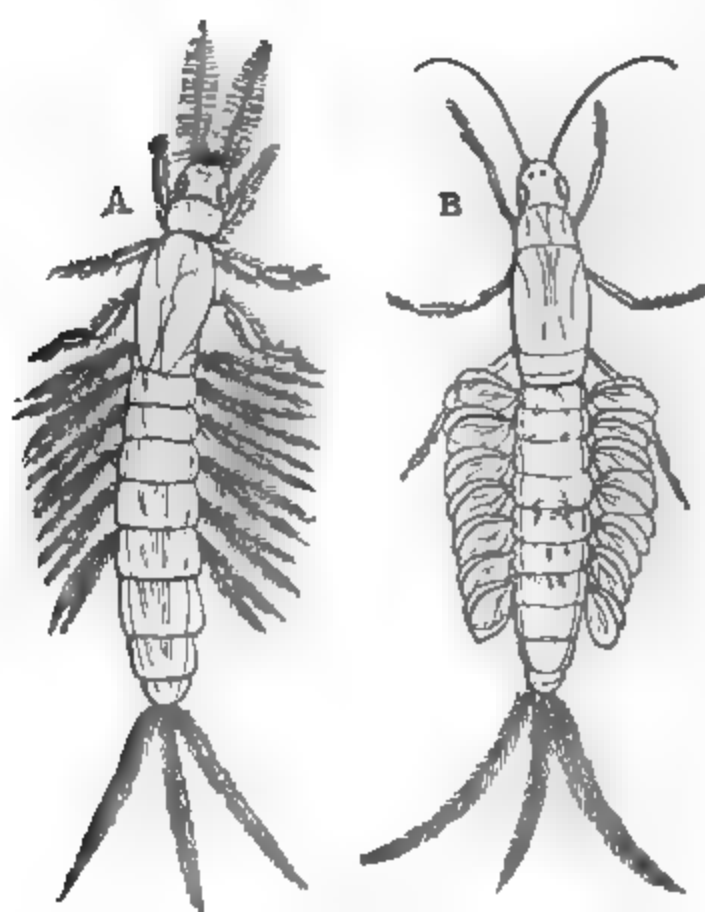


FIG. 11. AQUATIC INSECT LARVÆ, SHOWING THE BREATHING GILLS.

adapted for breathing air from water (Fig. 11). One singular little water larva, that of *Chloëon* (Fig. 3), one of the *Ephemeridæ* or "day-flies," possesses side expansions for breathing, which are moved by muscles, as are the wings; and from what is known of other insect larvæ inhabiting water, it seems highly probable that a pair of these flat "gills" to each joint of the body (Fig. 11) may have originally been developed. The next stage in the evolution of the wing from this side gill—within which, be it noted, the breathing tubes branch out—would consist in these "gills" being employed as agents of aquatic flight—that is, flight under the water. In time, the hinder gills would alone be devoted to breathing, whilst those of the middle of the body, being the most advantageously placed for locomotion, would become the wings. Probably the first insect wings were used to propel their possessors under water. Such a state of matters is now seen in *Polynema natans* (Fig. 12), which Sir John Lubbock discovered in 1862. Thereafter, to movements under water would succeed movements on the surface, and as the muscular developments progressed, the beginnings of aerial flight would be simply a matter of time. The late acquirement of wings in the developing insect of to-day is thus a fact not without its due significance. Such an event clearly enough shows

us, firstly, that flight was a power superadded to insect locomotion long after the evolution of the race from some primitive wingless type; and secondly, that wing-power was evolved through the intermediate stage of gills still represented in the water-living larvæ (Fig. 11) of our day-flies and their near kith and kin.

As Gegenbaur remarks, the wings correspond in nature with the gill-processes just described, "for they do not only agree with them in origin, but also in their connection with the body and structure." "It is quite clear," the same authority continues, "that we must suppose that the wings did not arise as such, but were developed from organs which had another function, such as the tracheal gills; I mean to say that such a supposition is necessary, for we cannot imagine that the wings functioned (or acted) as such in the lower stages of their development, and that they could have been developed by having such a function."

That this speculation is a highly probable one is proved by the curious fact that one insect (*Pteronarcys regalis*) belonging to the Orthoptera, inhabiting damp places, retains its gill-bearing organs throughout life. The mere possibility of the aquatic origin of insects is therefore placed beyond doubt by such an observation, whilst the fact that *Pteronarcys* belongs to the ancient order Orthoptera, shows its alliance with a primitive type of the insect class.

The consideration of the probable original or type form of the insect class now demands attention. The tyro in natural history knows that insects, along with spiders and scorpions, centipedes and crustaceans, form a great division of the animal world, to which the name of *Arthropoda* ("jointed-legged" animals) is given. The latter group in its turn forms a division of the great Articulate type, of which group the possession of a jointed body (seen equally well in the insect's body, in the centipede's frame, or in the lobster's tail) is a chief characteristic. Now, the origin of the Arthropoda from some lower and worm-like stock is not a matter which involves any very great draught upon the speculative faculty. From some such stock the tribes of spiders, insects, crustaceans, and centipedes have probably originated. Each class has passed in due time towards some more specialised and more distinctive root-form, from which further development would evolve in full the variety we find in these groups to-day. We have discussed

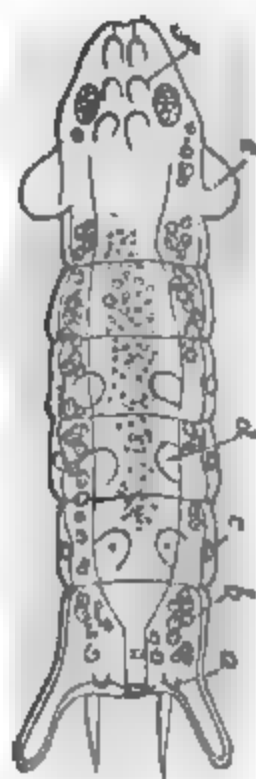


FIG. 12. *POLYTRIMA*.
a, antennæ;
b, rudiments of wings;
c, rudiments of legs.

in another paper the nature of the form which has probably through its evolution and development given origin to the crustacean hosts and legions. This form is the *Nauplius*, which, in the development of highest and lowest crustaceans alike, reappears as the root and stock of the class, and whose modifications form the puzzles of the philosophical naturalist of modern times. Now, what is so clear in the case of the Crustacea is well-nigh as patent in the history of insects. We certainly do possess in existing groups of insects forms which appear to fulfil the conditions incidental to the purpose of serving as a generalised type from which insect evolution may have taken place. Such groups are those known as the *Thysanura*, or "tuft-tailed" insects, and the *Collembola* of Lubbock, both of which orders may be found on examination to present us with the natural root stock of higher insects. A brief enquiry into the characters of these latter insects may appropriately bring this paper to a close.

Huxley, in a recent manual of comparative anatomy, speaks of the cockroach as an "insect without metamorphosis"—a fact already noticed—and remarks upon the obvious difference which exists between such a form as a butterfly, with its resting chrysalis, and the young cockroach, active throughout its whole development. "It is obvious," continues Huxley, "that a metamorphosis in this sense (*e.g.* the butterfly or moth) is a secondary complication superinduced upon the direct and gradual process of development exhibited by such insects as the cockroach (Fig. 5)." It is also laid down as an axiom of zoology that insects which, like butterflies, undergo a complete metamorphosis (Fig. 4) are more differentiated and better specialised—in a word, are the products of a higher phase of evolution—than those which undergo no metamorphosis. So also we are duly warned that insects "which never possess wings are less differentiated or more embryonic than those which are winged. And, finally, insects with the parts of the mouth in the condition of ordinary gnathites (or jaws) are less differentiated than those in which such gnathites are changed in form and function or become confluent." Now, on this view of matters, a butterfly is bound to be regarded, as we have seen on the grounds of its development, as a highly modified insect, far removed from the primitive type. On the other hand, "the insects which in this view of their morphological relatives occupy the lowest position in the group, are the *Collembola* and *Thysanura*." To these we may add the true lice and bird lice (*Mallophaga*), because these also undergo no metamorphosis and possess no wings.

What, then, are these *Collembola* and *Thysanura*, in whose

personnel and development we may expect to find the primitive form of the insect type? The Thysanura, of which the *Lepisma* and *Campodea* (Fig. 13) are good examples, are small insects, living in dark situations, such as amongst damp moss and under stones. The body is either hairy or (as in *Lepisma*) covered with minute scales, which constitute objects used for testing the defining powers of microscopes. On the whole, the Thysanura very closely resemble the young of the cockroach. The tail or abdomen is composed of some ten segments, and bears paired appendages, from seven to nine in number. They possess breathing tubes, but, as already remarked, want wings and exhibit no metamorphosis. The Collembola differ from the preceding group in possessing a tail consisting of six joints only, and a curious tube or sucker, by the viscid secretion of which they attach themselves to fixed objects. Their popular name of "spring-tails," derived from the presence of appendages formed on a "spring and catch" principle, and by means of which they are enabled to take leaps of considerable extent, indicates another peculiarity of the group. Only in one genus of the Collembola, likewise, are breathing tubes found. The jaws or "gnathites" in *Campodea* and the Collembola are not very markedly developed. As Sir J. Lubbock remarks, the jaws "are far from strong, but still have some freedom of motion, and can be used for biting and chewing soft substances." Of these lower insects, the genus *Campodea* (Fig. 13, B) is particularly interesting, inasmuch as it seems to combine in its person all the primitive characters which give to its neighbours their extreme interest in the eyes of naturalists. *Campodea*, which occurs in loose damp earth, has an elongated cylindrical body, long and many-jointed antennæ, with paired appendages on the first seven joints of its tail, and long tail-appendages likewise. Now, if we compare the young or larva of *Campodea* (Fig. 13, A) with the adult (B), we find little or no difference save in size. Its whole organisation reminds us forcibly of the young stage in such insects as the cockroaches and other Orthoptera (Figs. 5, 8); whilst there are larvæ in other groups of insects to

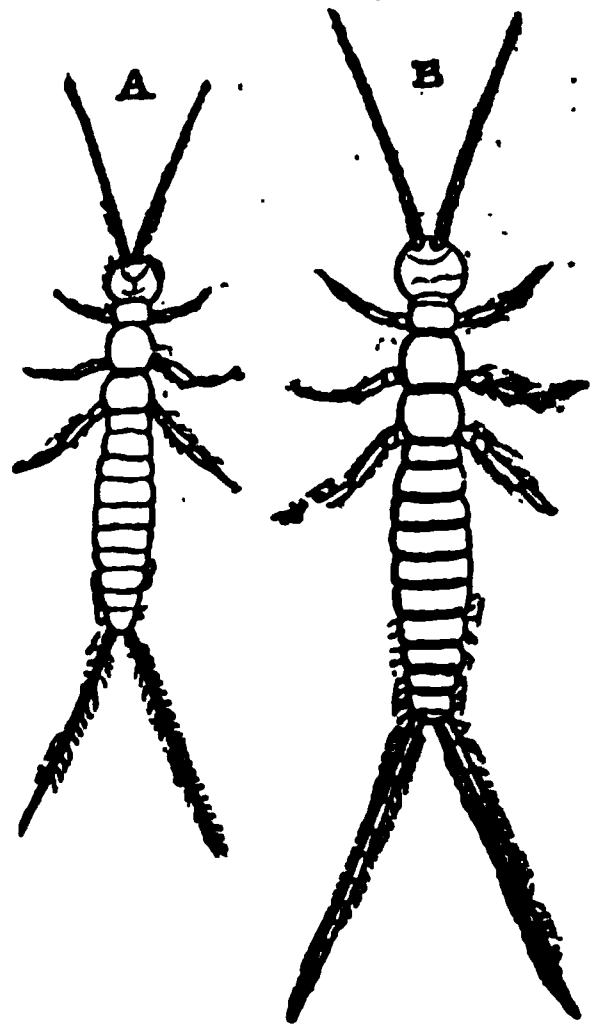


FIG. 13. CAMPODEA.
A, larva ; B, perfect insect.

which Campodea and its neighbours bear a close resemblance. Furthermore, the larva (Fig. 3, A) of the day-fly (*Chloëon*), which possesses the gill appendages already referred to, is exceedingly like this Campodea, whose mouth-parts appear equally capable of further development to form the jaws of the beetle, or of modification to become the suctorial apparatus of the butterfly.

Thus, on all the grounds on which it is possible or necessary to look for resemblances between Campodea and the young of higher insects, such likenesses are discoverable. And the conclusion is thus rendered highly probable that existing insects have been evolved from an ancient Campodea-like stock—that is, from an animal form with a jointed body, three pairs of legs, weak mouth-parts, one pair of feelers, and a tail provided with jointed appendages. Hence a mental forecast is prepared to see this Campodea form developing in one direction, through an insect like the young *Chloëon* (Fig. 3, A), or the water-larvæ (Fig. 11) already described, with their side “gills,” into winged and higher races; or in another direction, and through less modification perhaps, we may in our



FIG. 14. LINDIA.

“mind’s eye” behold Campodea growing in time into the stock whence the *Orthoptera*—our existing crickets (Fig. 8), grasshoppers (Fig. 7), and locusts—themselves a primitive group of insects, have sprung. And backwards, on the other hand, in the scale, retrograding from Campodea, we may even conceive of the stock from which that insect itself has sprung. Campodea within the egg must pass through the stages common to all animals at a like stage of development. There is a stage in the arthropod type when the young of the insect or crustacean is little else than a footless, imperfectly developed worm. There is even a worm-like larva of an insect allied to the gnats, which corresponds to such a description; and such low insect-larvæ become in turn obviously related in form to certain low creatures allied to the worm kith and kin. One of these low forms (*Lindia*) is depicted in Fig. 14. This legless organism is related to the well-known “Bear-animalcules,” and Rotifers, or Wheel-animalcules. Its jaws resemble those of the larval flies; it has a ringed body, and in other respects exhibits a close likeness to the young of many insects. Possibly, therefore, in some such primitive root, common to a whole host of animals, we may find the dim, ill-defined starting-point whence, led by Campodea, the insect tribes have

grown into the brilliance and aërial grace which mark their ranks to-day.

It may not be unprofitable, at the close of our investigation into insect history, to remind ourselves of the great problem which their development has lent its aid in part to solve. At the risk of apparently unnecessary repetition, let us keep in view that every such history, however its individual terms are to be accounted for, forms a link of greater or less importance in demonstrating the great law of evolution, modification, and adaptation as the true method whereby Nature has wrought out the endless variety of the children of life. Especially useful and important, moreover, is the history of the insect as illustrating the changes which the adaptation and modification of the young form may effect in the history of a species. So far from the chrysalis or pupa being a stage in the ancestry of the insects, we have seen that it represents merely a secondary and acquired phase of their development. As Fritz Müller has succinctly formulated it, "the historical record preserved in developmental history is gradually EFFACED as the development strikes into a constantly straighter course from the egg to the perfect animal, and it is frequently SOPHISTICATED by the struggle for existence which the free-living larvæ have to undergo." These words sum up the reason why insects in their metamorphoses exhibit all gradations and shades, from mere moulting of skin to complete change of form through a chrysalis state. Primarily they undergo a metamorphosis because they happen to leave the egg at a relatively early period of development ; but they share "metamorphosis"—using the word in the broad sense—with every other living being. It is this plainly discerned series of changes which has chiefly given to the study of entomology its fascination in the past. One may, however, well be regarded as enunciating a veritable truth when it is stated that the new light which evolution throws on the "why" and "how" a butterfly develops and a *Campodea* remains inert, is likely to invest insects, and indeed all other forms of life, with an interest far surpassing that which past years could have imagined or conceived.

ANDREW WILSON.

THE CZARINA ELIZABETH.

ON the 6th day of December, 1743, and on each recurring anniversary for the next nineteen years, the company of Life Guards of the Russian army stationed at St. Petersburg was invited to sup in the home of the Czars. Their annual inspection by their *Colonel* had that day taken place ; and the Empress, proud of a body of troops who for stature, comeliness, and elegance of dress had no equal in Europe, with a lively sense of gratitude for favours received and favours anticipated, closed the proceedings by an entertainment of imperial sumptuousness and grandeur in the great saloon of the palace. Scrutinising this assembly, especially on the first of these festive gatherings, a critical eye might easily discern, though every person present is an officer and a noble, an awkwardness and clumsiness in the movements and a clownishness in the manners of the guests, a general bovineness of facial expression, a want of refinement in the tone of the voices, not usually associated with the popular conception of a Queen's table. The supper-table is presided over by the Colonel, whose eye glances proudly on his stalwart subalterns ; for physique, the choicest officers in the Russian army. The Colonel, though about the average stature of man, is the most effeminate-looking among them. The face is beardless ; the features are fine and ladylike ; the hand is small, and little fitted to grip and wield the murderous sabre ; the skin is white as snow, with the exception of the bright and rather fleshy vermilion cheeks, as if never a breeze nor a beam visited it too roughly ; the bodily movements are lithe, nimble, and graceful ; the voice, like the voice of Shakespeare's ideal woman, is soft and musical and low ; the whole *personnel* being suggestive rather of a carpet knight than of a hero of the battle-field ; of one who was a soldier rather for the sake of that beautiful regimental suit of richest material than for love of the profession. In spite of all these personal disadvantages, the young Colonel is clearly held in awe and reverence ; which may probably be due to the fact that the Colonel is the daughter of Peter the Great and Catherine the whilom Livonian serving-wench, the Empress Elizabeth herself. And this was the way she commemorated the services and refreshed

the loyalty of the regiment who placed her on the throne of her sires, and who had come to regard themselves as the sovereign disposers of that goodly heritage. Jonas Hanway says that "she made a very agreeable figure in men's clothes."

The march of revolution, like the march of progress, is westwards ; and before the dawn of the nineteenth century its tutelary genius, whose chosen home at the present day is the city of Paris, resided in the capital of the Czars. In St. Petersburg, however, the insurrection was not the revolt of democracy against despotism, but of the younger scions of the house of Romanoff against their natural enemy the heir, and against the rights or claims of primogeniture. The throne was deeply seated as an institution in the superstitions of the people—serfs and nobles alike—one can hardly say their affections ; but the Divine right of the heir-at-law to the succession had to be proved by his ability to hold it against the machinations of his brothers, sisters, uncles, nephews, and nieces, who lived on plotting and intriguing against him to the last day of his life or theirs. Every vacancy in the Russian throne, from the death of Alexius Michaelovitch to the accession of Paul, was attended by a revolution. Peter the Great was the younger son : named joint-Czar with his weak and imbecile brother Ivan, he quietly edged him and his heirs out of the regal seat. Peter's widow, Catherine I., became his successor, to the exclusion of his grandson, Peter II., and his legitimated and legitimate daughters, Anne and Elizabeth, because Prince Menzikoff had the boldness to proclaim her ;—which led to the witticism that a pastrycook's apprentice had made a servant-girl an Empress. Peter II. reigned, not by his right of succession, but in virtue of Catherine's will. At his death the despotic power of the sovereign was abolished, and a limited monarchy inaugurated ; Anne of Courland, the younger daughter of Peter the Great's elder brother Ivan, being chosen by the council, the senate, and the chiefs of the army, as the first monarch under the new *régime*. The babe Ivan was named her successor in an imperial ukase, which Anne issued in the interest of Duke Bieren ; he was the grandchild of her elder sister, the Duchess of Mecklenberg. Elizabeth, who restored the succession in the line of Peter the Great, declared in her manifesto that she ascended the throne of her father, not because it was her rightful inheritance, but because the people wished it and the guards proclaimed her ; on these grounds she condemned a babe on the breast to lifelong imprisonment. Peter III. was declared Grand Duke by the favour of Elizabeth ; he was the son of her elder sister Anne, wife of the Duke of Holstein ; his restiveness under the

restraints she placed on his movements almost secured his exclusion from the throne. Catherine II., a German princess without a drop of the blood of the Romanoff in her veins, could find no mundane apology for her usurpation, and had to justify it by the assertion that "Heaven had called" her to wield the sceptre ; and it is said that it was her intention to have passed over her son Paul I., whom she hated, and to have named her grandson Alexander I., whom she loved, her successor, when a stroke of apoplexy frustrated her scheme. Alexander, in his last will and testament, nominated his younger brother Nicholas, and not the older Constantine, who had previously renounced his rights to the throne, preferring a life of luxurious and uxorious sloth in his Polish home to the cares, responsibilities, and dangers incident to that high position.

The ambitions which had long lain dormant in the indolent, pleasure-loving nature of Elizabeth, opening their blinking eyes occasionally during the reign of the Czarina Anne, were roused into action at last by the resolution of the Regent's ministers to declare her Empress. Elizabeth might have ascended the throne in 1730, when Anne of Courland got it ; an hour or two after the death of Peter II. her surgeon, Lestock, entered her bedroom, and, waking her, entreated her to appeal to the guards, for a long time the king-makers of the empire, and march at their head to the senate and claim the crown. She rolled about in her bed in an agony of perplexity, willing to be enthroned, yet afraid to strike ; but she could neither be coaxed nor coerced into action, and did not so much as leave her warm couch. As she turned to sleep again she said she was too young, though she was twenty-one years of age and the mother of several children. In her riper years, referring to this incident, she said to Marshal Keith that she "was glad she had not been persuaded to assert her rights to the throne, as the people would never have tolerated her." Circumstances were changed in 1742, when she was thirty-three ; her nature, enlarged by years and experience, had accommodation for the passion of ambition as well as for the passion of love. Guided by the advice of Lestock and the French Ambassador, the Marquis de la Chétardie, her joint-husbands along with Grenadier Alexius Razoumofsky, by whom alone it is alleged the title could be legally claimed, she set herself to the task of gaining the affections of the guards ; she lounged familiarly about the barracks ; she drove through the capital in company with the common soldiers, who, mounted on her sledge, chatted jocosely with her over her shoulder ; every day she brought some of them home to her palace ; she adopted every device to ingratiate herself with the people. The tongue of Lestock was like to have ruined the conspiracy ; in every

coffee-house in St. Petersburg he babbled of the impending revolution, till at last the Regent heard of it, and taxed the Princess with fostering disloyalty and treason. Elizabeth vehemently protested her innocence ; appealed to heaven to establish it ; challenged and defied her calumniators to produce evidence of her guilt. The interview ended by the two ladies rushing into each other's arms in a rapture of reconciliation, bedewing their faces with their mingled tears. In a panic Elizabeth ran away to report the scene to her advisers, who entreated her to control events and not allow them to drift. On the following morning there was handed to her a card, on back and front of which appeared the rudely sketched outline of a lady : on the one side she wore a crown, on the other the costume of a nun, instruments of torture lying at her feet. On the card was written—"Your Highness must now absolutely choose one of these two, either to be Empress, or to be put into a convent and see your servants perish by the rack and gibbet." In the darkness of the succeeding night she stole to the barracks, which she was wont to frequent during the day, and besought the aid of the grenadiers in claiming the throne of her father. They hailed her Empress, and swore to vindicate her rights to the last drop of their blood. At their head she marched to the winter palace, and, penetrating into the apartments of the Regent, made her and her husband and children prisoners. Detachments were immediately despatched all over the capital to seize the members of the Government and the most distinguished of the partisans of the court. At break of day the senate and the principal nobility were convened at the palace, and listened to the manifesto the new Empress proposed to issue in defence of the proceedings of the previous night ; whereupon the whole company, without hesitation and without pressure, took the oath of loyalty. Before noon Elizabeth had removed into the imperial palace, and might have been seen fondling and nursing the babe whose throne she had usurped, and who responded to her caresses by crowing and kicking in the exuberance of its infant glee and innocence. The troop of soldiers who were sent to take it prisoner found it sleeping peacefully by the bedside of its nurse ; they stood patiently beside its cradle for upwards of an hour till it awaked, when, each anxious to be its captor, they promiscuously clutched at it, and were like to have torn its limbs apart. Its cries and tears brought them to silence, and during this peaceful interlude the adroit nurse wrapped a cloak round the babe, and, pressing it to her breast, asked to be taken to those who had sent them thither. It was handed over to the new Czarina's care. As the cheers and cries of the soldiers, "Long live Elizabeth !" rent the air, the babe danced and crowed in her arms, as though it

would join in the revelry of the hour. "Poor thing !" said the Empress, "thou perceivest not that thou art endeavouring to speak against thyself." During her reign of twenty years Elizabeth kept Ivan a state prisoner, removing him from convent to convent, from fortress to fortress, so as to outwit any treasons that might be hatched for his release. Only once did she express a desire to see him. When he was sixteen years of age she had him brought privately to St. Petersburg to the house of Count Schouvaloff, whom Voltaire, writing to Frederick, calls "the last of the loves of the Czarina," where, without disclosing herself, she saw him shedding a copious flood of tears over his misfortunes and sorrows. He grew up to be a handsome young man, six feet high, of massive muscular build, with auburn hair and a fair complexion, rendered livid by his long imprisonment, which, though it had not injured his robust constitution, had left him mentally little better than an imbecile. His mania took a half-religious form ; he had frequent conversations with the angel Gabriel. Elizabeth probably dealt no more harshly with him than the exigencies of her position required, consistently with sparing his life. His education was entirely neglected, except in so far as his father and mother taught him ; at the age of six he was taken from their custody and confined in a separate prison. He could neither read nor write ; his utterance was slobbering and incoherent ; his temper was ferocious and undisciplined ; his potations were so long and deep that at last Elizabeth was forced to restrict the luxuries she allowed him. Peter III., it is averred, had some design of denying the legitimacy of Paul, the son of himself and of Catherine the Great, and declaring Ivan his successor. He was murdered in the month of July 1764, by his gaolers, to prevent his escape during an assault made on the fortress of Schulenberg by a band of conspirators, who, imagining themselves wronged by Catherine, had associated to secure his release and restoration to the throne.

The Princess Anne of Mecklenberg, mother of the babe Ivan whom the deceased Czarina Anne decreed her successor, was a shiftless, slatternly woman ; quite destitute of the gifts necessary to rule a turbulent country, or defend the inheritance of her son during whose minority she had been appointed Regent at Bieren's deposition. She was niece to the late Empress, and would have been declared heir to the throne but for Bieren's ambition. Her mother was the Grand Duchess Catherine of Mecklenberg, a woman of such easy virtue that it is possible that even Peter the Great himself, her own uncle, may have been the father of her child. The evidence of Pollnitz, who relates a scene that happened in Magdeburg in 1717,

of which he alleges Frederick William of Prussia to have been an eye- and ear-witness, is the warrant for this statement. In 1719 this Grand Duchess, forgiven as long as she sinned with Czars, was divorced by her husband. She returned to Moscow, where she resided till her death, after having presented her husband with a princess, baptized at birth Elizabeth Catherine. On Anne's accession to the throne this child of sin, who in due time became the mother of babe Iwan III., was invited to St. Petersburg, and, on her embracing the national religion, was re-baptised by the name of Anne. She was then but twelve years of age, and yet the Empress would choose her a husband. Prince Anthony Ulrick of Brunswick, nephew of the Kaiserinn at Vienna, was sent by his aunt as a candidate for the vacant heart and prospective throne ; a dapper, dressy gentleman, timid and hesitating in counsel, yet bold as a lion on the battle-field ; loving and sweet-tempered ; but so diminutive, that both the Empress and the Princess received him with a smile of kindly derision, and kept him sighing and serving a weary probation of six years before they capitulated. The Princess was tall and handsome ; had a very pretty figure, with a good shape ; and spoke with fluency several languages. Her regency brought herself and her family to destruction. The Princess Elizabeth hatched treason under her very eyes, which she wilfully persisted in keeping shut when others tried to enlighten her. She was too lazy to act ; too wrong-headed to act wisely, had she tried it ; too wilful to be guided by her ministers. Her answer to their expostulations was a laugh of incredulity. How did Prince Anthony strut and fume and ejaculate at her perversity, blindness, and inaction, urged on by visions of his own downfall and exile, and perhaps worse ! To the warnings of foreign ambassadors she paid as little heed. "Your Imperial Highness," said the Marquis de Botta, the Hungarian Ambassador, "has refused to assist the queen my mistress, although the two courts are in alliance ; but as that can't be helped, I hope, with the aid of God and our other allies, we shall get out of our difficulties ; but at least, madam, do not at present neglect the taking care of yourself. You are on the brink of a precipice. In the name of God, save yourself, save the Emperor, save your husband." It was with difficulty her friends could get access to her apartments to expostulate with her. For several days together she would remain shut up in her chamber, leaving affairs of state to manage themselves. To dress was a drudgery to the indolent creature ; she moved about the palace like a drab, her only clothing being a night-cap and a petticoat. The least trifle fretted and perplexed her ; and she floundered helplessly,

and tossed and stumbled in her efforts to reach some firm table-land of action ; resolving, and annulling her resolve ; a mystery and vexation to herself and her ministers ; of a sad, melancholy temperament, yet withal anxious to please, and to see all around her smiling and glad. Russia was never governed with more mildness than during her short regency of a year ; but the mildness was that of a relaxed and nerveless grasp, not that of a firm hand of discipline ; not the mildness of conscious mercy that can stiffen and strike when occasion calls, but of incapacity that has nothing *moral* about it, and neither steers the barque of state nor knows whitherward it should be steered.

A throne which is not “deep-seated in a nation’s will,” but dangerously poised and balanced on the pinnacle of the social temple, where a little gust of disapproval may make it topple over, has at best but an insecure foundation. Its stability is trusted to a select few, whose allegiance must be purchased by gifts, and bribes, and honours. Elizabeth had therefore first of all to reward the Preobreshensky grenadiers, whose bayonets had borne her to her giddy height. The officers and privates alike—the latter illiterate, boorish, and gross—were created nobles of the Russian Empire. She made Razoumofsky Grand Master of the Hunt, conferred on him the title of Count, and gave him the blue ribbon. The common soldiers received lieutenants’ commissions ; the corporals were transformed into majors ; the quartermaster and armourer were made lieutenant-colonels ; the sergeants strutted about as colonels—we lately saw them all supping in the palace. The new nobles held high carnival in St. Petersburg. Their poor, weak heads were not steady enough to carry calmly the heavy burden of their greatness. They kicked out of their path the peaceful citizen who ventured between the wind and their nobility. The streets of the capital were too narrow for their swollen pride ; two could not walk abreast if one of them were a civilian, and the passers-by soon learned how dangerous it was to obstruct the thoroughfare. The Empress herself did not always receive from them the honour due to sovereigns. Grunstein insulted her to her face, whereupon Elizabeth banished him to the vast estates she had given him to enable him to support his new position and dignities. They established in St. Petersburg the doctrines of communism—at least, in their own interest. Whatever they looked on with eyes of desire, they annexed. They entered the mansions of the old nobility, and removed at their pleasure articles of *virtu* and pieces of cabinet-work with which to decorate their own ; and if the tears and entreaties

of high-born ladies were brought into play to melt and move them to clemency, the requisitionists generously consented to take the value of the confiscated wares in money. They entered the public-houses and refreshment-rooms, and ate, and drank, and smashed at discretion, none daring to make them afraid, or present the bill as they swaggered to the streets again. What else could be expected from men who a few days before were serfs, whose intelligence had been educated, and whose conscience and reason were appealed to, by the rod, and who had been disciplined by the free use of the knout? By degrees, after their self-consciousness and vanity had luxuriated long enough in the sense of their greatness, the majority subsided into sanity, and took on the polish of milder manners; the intractable minority were expelled from the corps, and distributed among the other regiments of the army.

The humane Elizabeth, as Voltaire, writing to her dictation, calls her—(his “Life of Peter the Great” was written from documents supplied by her Majesty, and, before its publication, was submitted for her approval; she returned the MS. with the command, “Colour up the eulogies”)—on her elevation to the throne, registered a vow that during her reign no criminal should pay for his crimes with his life, “a species of mercy which,” according to Sir Jonas Hanway, “neither her subjects nor foreigners pretend to understand.” In her magisterial or executive character she struck terror into the hearts of evil-doers by the free use of the knout, the branding-irons, and the knife. Mrs. Vigor’s “amiable creature” could never hear of the shedding of blood without shedding tears; and she received tidings of the victories of her troops—ill news, as by magnetic laws, rebound off, and do not penetrate the sacred circle that environs a Russian sovereign—with a dirge for the dead, and not a pæan for the victors. The reformation, or deformation, she wrought in the penal laws of the country seems practically to have amounted to this: that felons who in the reigns of her predecessors would have passed out of this present life *viâ* the scaffold or the block, were thrust out of society *viâ* the whipping-post. The executioner surrendered his office to the public scourger, who, having manacled his victim, placed a rope under his arms, and hoisted him several feet from the ground, precipitating him again with such abruptly arrested velocity that his shoulders were dislocated; laid on with hard, dried elk-skin lash—a weapon which, if deftly handled, despatched the culprit in two or three blows; and when it is added that every petty magistrate had authority to administer this chastisement at pleasure, and that as many as 333 lashes were given at a time, it may be doubted if the

sufferers under this *régime* of mercy lauded the Czarina's humanity and tenderness of heart with the cordiality and gush of the French philosopher. If the criminal survived his punishment, mercy in many cases ordained that his nostrils should be torn and his tongue cut out, thereafter graciously banishing him to the prison-mines of Siberia, to spend the rest of his life in enriching the commonwealth by his unremunerated labour. Praise may be due to the Czarina for the humanity of her intentions ; but a Government that is too weak to make the pulsations of its mercy felt at the remotest extremities of the executive body-politic, is not justified in introducing changes which rather augment than soften the severities of the established mode of punishment. Before the magistracy hit on the happy device of knouting the culprit to death, thereby reconciling the conflicting duties of obeying the imperial will and ridding society of its enemies, there was not a tenantless cell in all the prisons of Russia. Writers of the period estimate that, during the earlier years of her Majesty's reign, there were seldom fewer than 30,000 criminals in prison at one and the same time. Elizabeth, however, was not so tolerant of gibes and flouts against her person or her morals as she was of crimes against society ; and the cruelties she peremptorily inflicted on two ladies of birth, beauty, and fashion, will remain an indelible stain upon her name. She accused the Countesses Bestucheff and Lapouchin—the former the sister-in-law of her Chancellor, the latter the most beautiful woman in Russia—of hatching a conspiracy in the interest of the dethroned Iwan : the true cause of offence is a matter of contention among historians, some alleging that the ladies had commented too freely on her Majesty's moral delinquencies. They were each ordered fifty strokes of the knout. The Abbé Chappé d'Auteroche tells how the Princess Lapouchin, without knowing the nature of her sentence, was led to the public place of execution ; the hangman tore the cape from her bosom ; in a moment she stood naked to the waist. She was then lifted up and tied on the back of a second functionary, and received her punishment, after which her tongue was cut out, and she was banished to Siberia. Elizabeth's old surgeon and lover, Count Lestock, who had planned and who was the pulse of the revolution that placed her on the throne, fell into disgrace. She accused him of the crime of haughtiness and impertinence, and ordered him to be confined in prison. Hearing that the Count refused all food, she wrote him a charming letter, entreating him, for her sake, to take care of his health. He languished in prison till, at her death, Peter III. released him. There was a dramatic side also in her acts of mercy ; it is

especially evident in her treatment of those whom her usurpation obliged her to regard as foes—the statesmen and ministers of the cabinets of Anne and Iwan. She condemned Marshal Munnich to be quartered ; Ostermann to be broken alive on the wheel ; others to be beheaded ; the estates of all to be confiscated—immediately commuting their punishment into banishment to Siberia. The half-comic, half-tragic exhibition was carried to the extremest limit in the case of Count Ostermann ; he was allowed to ascend the scaffold, to speak a few words of forgiveness to the executioner, to breathe a brief prayer commending his soul to God ; he was then blindfolded and laid down with his head on the block. An officer thereupon told him to rise ; adding, that her Majesty had been graciously pleased to spare his life, but that before evening he would be on his way to Siberia. The most distinguished of the exiles she summoned from the penal settlements, to make room for the new arrivals, was Field-Marshal Solitzin. He had vowed never to shave till he was recalled ; when shown into Elizabeth's presence, his snow-white beard reached down to his belt.

Elizabeth's eccentricities were chiefly deviations from the straight line of personal purity. She ran a narrow risk of being forced to take the veil in 1732, when Anne ascended the throne, although, as the wits said, there was not an ounce of nun's flesh in her whole body. Frederick the Great generalised the moral aberrations of her life in the fierce epithet, *l'infâme catin du nord*. On another occasion, when the allied powers of France, Hungary, and Russia were frowning on him like an avalanche, he is reported to have said, "Own, my dear Kynphausen, that I am much to be pitied for having to do with the three most abandoned women in Europe—Maria Theresa, Elizabeth, and the Pompadour : you see, I have plenty of work on my hands." It is the unjust classification of an embittered man, who, even in his joyous hours, never hesitated to sacrifice truth and accuracy for the sake of an epigram. The name of the pure and noble Hungarian Queen should not have been sullied by such an association ; and Frederick felt the falsehood of his strictures, for on her death he wrote to D'Alembert, "She was an honour to the throne and to her sex. I have made war on her, yet never was her enemy." The Czarina professed to hate marriage, probably because of the restraint her husband might have put on her roaming and inconstant affections ; yet she often said to her confidants that she was never happy except when she was in love. The story of her secret marriage to the common soldier has already been referred to. The amours of her life beggar the descriptive power of language, and

would put the ink that related them to the blush. Her intemperance, like her sensuality, was, especially in her later years, unbounded. Her physicians could not check her self-indulgence even by conjuring up the threat and certainty of death. Her attendants dared not refuse her drink when she demanded it ; indeed, she had a cask of brandy at the head of her bed, of which she kept the key. For weeks before her death she was in a state of stupor and intoxication : it is averred that she died with a saucer of cherry brandy at her lips. One other eccentricity she had—for, considering the moral temper and complexion of her life, it must be so regarded : she was scrupulously devout. No saint in St. Petersburg prayed by the clock with greater punctuality and faithfulness than this soiled dove of the palace. Her demeanour at church was a religious education to her subjects. She never forgot the duty of confession, and spoke with the profoundest penitential regret of her sins, confessing not only the “camels,” but even the “gnats,” which others dismissed as too trivial for confession, but which her strictness would not allow her to overlook. Lust ! liquor ! religion !—Elizabeth’s private life illustrated their grossness and grace alike, and showed how the discordant and antagonistic affections might be made to fraternize on terms of mutual toleration, the aggressive moral principle taking no offence at, claiming no rights of sovereignty over, and putting no restraint upon, the freedom and vagaries of its licentious colleagues. The same moral laxness which she claimed for herself she allowed to others. Finding no issue from the marriage of the Grand Duke and Catherine, afterwards Empress, Elizabeth questioned the latter ; the consultation ended by the Empress ordering the Grand Duchess to produce an heir at once—adding, that the exigencies of the state required successors. The Czarina was the finest dancer in her capital ; nothing delighted her so much as a quiet dance at the houses of her friends and favourites. She had a good voice, and often volunteered to sing for the enjoyment of the company, although she ran shudderingly home-wards if there chanced to be a deformed person among the guests. She had a weakness for being thought a good cook, and her flatterers always found out that to those dishes which her royal Highness had touched, a delicacy of flavour had been imparted above that of the other viands on the table.

In the second year of her reign Elizabeth nominated her nephew, Charles Ulrick, Prince of Holstein, her successor on the throne. On his apostasy from the Lutheran to the Greek faith, inevitable on his predestination to this exalted position, he was re-baptised by the

name of Peter Feodorovitch. The heir being the natural enemy of the Crown, he found himself at St. Petersburg a prisoner at large. His amusements were regulated for him, drunkenness being the one on the list to which he took with the heartiest relish. Spies beset his every path ; he was ever haunted with the oppressive feeling that the imperial eye was on him. His protests—rather of the whining than of the manly type—were reported to her Majesty, and embittered her heart against him. “If I had remained Duke of Holstein, I should now have commanded a regiment in the Prussian service, and had the honour of serving my master”—meaning Frederick the Great—“an honour I esteem far superior to that of Grand Duke.” At this period Frederick and Elizabeth were at war, the Prussian King having made some rude jests and comments on the imperial “improper female.” Peter’s foolish grins and sneers as Grand Duke, his ostentatious contempt for everything appertaining to Russia—her religious rites, her military system, her commanders, and her nobility ; his persistent wearing of the Prussian uniform when he became Emperor—soured the national mind against him, and nursed the conspiracies which led to his downfall and murder within a year after his enthronement. Peter’s mother, Anne, was a woman of splendid stateliness ; from head to foot, writes the historian Bassewitz, envy could find no imperfection in her form. He exults in the memory of her majestic deportment, the regularity and repose of her features, and the tenderness of her affections. She had a magnificent mane of jet-black hair, plaited like a coronet round her head, cheeks of a delicate blush colour on a background of skin of the purest white. Her eyes were of a “couleur indécise,” and full of liquid fire. The same historian goes into ecstasies over her penetrative insight, her goodness of heart, her pure life, her varied accomplishments. He says that she spoke elegantly, in addition to her mother tongue, the languages of France, Germany, Italy, and Sweden. In her youth a Russian nobleman assailed her with his addresses, tears, glances, and sighs. Finding her one day alone, he threw himself at her feet, and, offering her his sword, presented his breast and entreated her to end his miseries at once, either by crowning his life with her love or giving him release in death. “Give me the sword,” said she ; “you will find that the daughter of your Emperor has strength and spirit enough to rid herself of a wretch that insults her.” Count Apraxin rose up from his knees and slunk out of her presence. It is alleged that Peter the Great in dying wished the sceptre to pass into her hands, and that he had even taken steps to annul the decree in which he had declared his wife his successor.

On his death-bed he called for pen and ink to write his will, but his fingers failed him ; he summoned Anne, who, besides being his favourite child, was his amanuensis ; but before she sat down to write, understanding and coherent utterance deserted him, and he died with the unfinished sentence on his lips, "Leave all to ——;" a sentence which the courtiers—evolving out of their own consciousness, perhaps influenced by their wishes, the dying monarch's intentions—completed by inserting the name of Anne. This peerless lady, brought up in the hope of sitting on the thrones of Russia and Sweden, the former by inheritance, the latter by marriage, died uncrowned ; and the story of her learning, her virtue, her greatness of character and stateliness of form, is only chronicled in the gossip of obscure historians, and known by the bookworm and antiquary.

The fine physique of Peter and Catherine was inherited by Elizabeth, though in a less degree. In her early womanhood she was handsome. "Time, which," as Sir Jonas Hanway, describing her, remarks, "wears away the charm of youth," had made her corpulent ; but as she was tall and lithe, with her head finely set on her shoulders, the plumpness did not take away from her symmetry. A staid, unimaginative Scotch doctor, resident for a short time on the shores of the Caspian, had an extempore view of her and interview with her in one of the rooms of her palace while visiting one of the officials of her court. He describes her as "of large stature and inclined to be fat, but extremely beautiful ; and in her countenance I saw so much mildness and majesty"—a brace of attributes which dull men and women always distinguish in the faces of sovereigns—"that I cannot in words express them. Her hair was black"—light brown, says Mrs. Vigor, whose view of her was more than a passing glance ; "her skin, white as snow unsunned. It was surprising that a fat though young woman could walk so silently as she did, insomuch that I could scarce hear her feet on the floor,"—the fleshy, softly-moving fairy ! Her cheeks were rosy in her youth, but years, aided and abetted by the liberal use of brandy, had given the bright carmine a deep purplish tint ; and these, with her fine teeth which justified her frequent smiles, her laughing blue eyes, her light brown hair and "well-shaped mouth," made up a very charming personality. Her linguistic accomplishments were only less than her sister's. She had not Anne's repose of manner, always suggestive of strength ; nor her self-reliance, robustness of character, veracity, and constancy of nature. She was giddy and volatile as a girl, and developed into a gay and heartless woman, with smiles for everybody, in which no sincerity dwelt ; and a sweetness of behaviour and caressingness of manner

that often concealed treacherous intentions. She was very fond of dancing, of masquerades and balls, of hunting and riding ; and possibly it was a prudential policy on the part of a Russian princess to affect to make such gaieties her end in life, even though she cherished more daring ambitions. Her dangerous position taught her the arts of deception and cunning ; and the light-headed, giggling girl, seemingly absorbed in her butterfly existence, lived in dreams and visions of her own to which in due time she gave an objective existence. In private fellowship she revealed a crafty understanding, much good sense and facility of adapting means to ends, which evoked in those who knew her well the suspicion that the witless girl of the ball-room was the sham and not the true Elizabeth.

The wealth, the rank, and the beauty of Elizabeth, while she was still Princess, brought many suitors to her feet. Her father had set his heart on seeing her seated on the throne of France as the queen of Louis XV. ; and though the courts of Europe intrigued against the match and upset it, Peter did not abandon hope till Louis married the diminutive and long-suffering daughter of Stanislaus, titular and pauper King of Poland. Her mother, the Empress Catherine, decreed in her will that she should be wedded to the Prince of Holstein, Bishop of Lubeck, whose brother in after years, at the peace of Abo, she placed on the throne of Sweden ; and that there should be paid him a dowry of 300,000 roubles. The Prince died before the marriage-day arrived. The Margrave Charles of Anspach, Prince of the blood of Prussia, who asked the boy Emperor Peter II. for her hand ; the Persian tyrant Kouli Khan, who sent an embassy of 16,000 men, with elephants and cannon, to woo her, and who, in the vehemence of his love, offered to apostatise to Christianity, and order his subjects also to renounce their faith ; the Prince Louis of Brunswick, brother of Anthony Ulrick, whom the Courlanders on Bieren's banishment had elected their Duke—all presented themselves as candidates for the smiles and affections of the Princess. The pressure which the Regent Anne put upon her to force her into wedlock with Prince Louis, whom Elizabeth hated, was a powerful weapon in the hands of the conspirators in persuading the Princess to rise above her constitutional indolence and claim the throne as her rightful inheritance. It has already been remarked that she had several illegitimate children ; the Princess Tarakanoff being the only one whose name, because of her tragic life and death, history holds in remembrance ; though scandal finds in the physiognomy of Paul I. evidence of his descent from a repulsive-looking Calmuck whom it was Elizabeth's whim for a time to love. Catherine's hatred of her

reputed son seems certainly to give plausibility to the suspicion that the two ladies had conspired to present him to the people as the legal heir.

The pragmatic sanction of Charles VI. of Austria, by which he aimed to secure the imperial throne in the line of his daughters, threw Europe into convulsion. To distract the attention of the Regent Anne and her ministers from the wars that thereupon ensued, France intrigued to embroil Sweden with Russia. Stockholm was torn by the contentions of two great political parties, the *Hats* and the *Night-caps*. The former, giving a willing ear and open hand to the whisperings and bribes of the French court, stirred up patriotic feeling against the conquerors of Pultawa. They represented that the Russian armies had been decimated by the Turks ; that fate would never again offer them such a golden opportunity to avenge the disasters of a generation back, if they failed now to take occasion by the hand ; that once more, as at Narva, where 8,000 Swedes routed 80,000 Russians, the world might be brought to acknowledge that the fighting qualities of the two nations were as one is to ten. Their counsels prevailed, and Swedish Finland was chosen as the theatre of war. After compelling the Swedes to abandon the fortified town of Fredericksham, Marshal Lacy, whom Elizabeth continued in the command to which the Regent had appointed him, captured the entire Swedish army. 17,000 soldiers, entrenched in what seemed an impregnable stronghold, laid down their arms to an equal number of Russians, who, according to Mannstein, a Russian commander, would have infallibly been beaten had they dared to attack the fortifications of the enemy. When the peace of Abo was concluded in 1743, it was found that the greater part of Finland had become a Russian principality.

On ascending the throne, Elizabeth's wish was that peace and good-will should prevail between the courts of St. Petersburg and Berlin. Gifts were exchanged by the two sovereigns. Frederick sent to his imperial sister, while she was a-building Zarsko-Zelo, carved and festooned sheets of amber sufficient to cover the walls of one of the largest rooms of the new palace. But the friendship was soon overclouded. Frederick's free comments on the Czarina's morals goaded her into paroxysms of fury, and, forgetting her aversion to bloodshed, she allied herself with his enemies, who, instead of sneering at her frailties, promised her "a gift of two millions for her pleasures," the greater part of which was contributed by the British taxpayer. On Christmas Day, 1747, there marched from Moscow an army of 37,000 men to avenge the wrongs of Maria Theresa, hired

by George II. at 4*l.* a head. Elizabeth travelled from St. Petersburg to bid them God-speed. Her travelling equipage, which contained "a bed, table, and other conveniences," was set on a sledge drawn by twenty-four post-horses ; and at fixed distances along the route there blazed great piles of wood to give light to her Majesty and her court if they chanced to pass during the night. The march of the Cossacks was arrested by the peace of Aix-la-Chapelle, long before the Prussian horizon came into view. But Frederick's bitter tongue and caustic wit could not withstand the temptation to satire which the Czarina's incongruities of faith and morals offered him. He wrote little quizzing rhymes which found their way to St. Petersburg, and which Elizabeth answered in the following minute :—

"At St. Petersburg, 15th May, 1753, at a meeting of the Russian senate, after two days' deliberation, this conclusion was come to : That it should be and hereby is settled as a fundamental maxim of the Russian Empire, not only to oppose any further aggrandizement of the King of Prussia, but to seize the first opportunity for overwhelming with superior force the House of Brandenburg, and reducing it to its former state of mediocrity." And two years later the following decision was come to :—

"October 1755 : That it is our resolution to attack the King of Prussia without further discussion whensoever the said king shall attack any ally of Russia, or shall himself be attacked by any of them."

It were profitless to tell the wars and intrigues, the victories and defeats, the marches and countermarches of the years 1757–1762. Let it suffice to say that Elizabeth's outraged feelings were more than avenged ; that the Russian armies under Apraxin, Fermor, Soltikoff, and Todleben, proved Frederick's only invincible foes ; that for some years East Prussia was annexed to Russia, not to be restored till after Elizabeth's death ; and that the Czarina died with the sweet consciousness in her heart, in so far as she was sober enough to be conscious, that her victorious armies had penetrated to and battered down the gates of Berlin itself, the capital of her enemy.

On Christmas Day 1761 according to Russian style, 5th January 1762 European style, she ceased to be torn by the passions of revenge and lust which for many years had held high carnival in her nature. For weeks before her demise she lay in a half-comatose condition, her life trembling on the verge of the awful precipice ; a fact which was carefully hidden from the outer world by the officials of her court, whose interest it was that she should live. No one even at St. Petersburg knew that her many excesses had at last

brought her to the gates of death, till the prayers of the church for her recovery were invoked. Her corpse lay for several days on the "Parade Bed," the new Czar and his Czarina, and future murderess, feasting, and dancing, and dining, and receiving the congratulations of their subjects; Elizabeth's palace quite deserted but by the ladies and gentlemen in waiting, to whom the duty had been assigned to keep watch over the dead, and who avenged their temporary exclusion from the gaieties of the new court by petty sarcasms and jokes at the expense of the departed, on whose face in life they dared not look without awe. The grand saloon of the palace, where stood the imperial bier, was draped with black, and festooned and garlanded with cloth of silver. The sombreness of the chamber was deepened by the flickering wax lights. The coffin itself was covered with cloth of gold trimmed with silver lace. A rich crown was placed on the head of the corpse. The watchers referred to, who enlivened the gloom of the occasion with jest and chaff, were four ladies and two officers of the Life Guards; their robes were symbolic of the profoundest sorrow and lamentation. At the foot of the bier stood a priest reading his Bible aloud, to be relieved by another when his voice failed him; the holy incantation not only drove back the aggressive powers of evil, urgent to claim the body as theirs by right, but magically opened the doors of heaven to give the emancipated spirit abundant entrance. All who came to gaze on the face of the corpse had to kiss its hand; such is Russian etiquette.

The Czarina was buried with pomp and pageant. The distance from the palace to the tomb of the Czars was $2\frac{1}{2}$ English miles, which were paved with wood for the occasion. On each side of the street the soldiers of the garrison were drawn up in line. At ten in the morning the solemn procession left the castle, the bells of St. Petersburg ringing out clear and mellow to the frosty skies. First there marched 300 grenadiers, followed by 300 priests clothed in white, walking two abreast, and singing dirge and prayer. Next came, in single file, the high dignitaries of the empire, bearing the crown and the insignia of the various orders and honours conferred on the deceased by herself and others. The hearse was followed by the new Czar, his mourning cloak spread out like a sheet and carried by twelve chamberlains, each with a lighted candle in his disengaged hand. The relatives of the Czar came next, followed by Catherine on foot, whose cloak was borne by her ladies. Three hundred grenadiers brought up the rear of the procession, which was preceded, attended, and followed by the jostling and brawling populace of the capital.

JAMES FORFAR.

SOME OF POPE'S FRIENDS.

EVERY reader who is acquainted with the literature of the Queen Anne period knows something of Pope's quarrels with the Grub Street hacks of the day, as well as with authors whose place in literature is equal, or nearly equal, to his own. Indeed, we are so accustomed to think of Pope as he appears in the "Dunciad" and in his famous "Epistles," that we are apt to forget that, if he was sometimes a relentless enemy, he was also a warm-hearted and, in many instances, a faithful friend. The investigations of the late Mr. Dilke have laid bare to the world the dissimulations and artifices of this consummate satirist; and the world, which values truth above all things, ought, no doubt, to be grateful to the critic for exhibiting in all their minuteness the foibles of a great man. Pope's love of equivocating, which he allowed he could do "pretty genteelly," is a fault too palpable to be concealed. He had a passion for intrigue, and "hardly drank tea without a stratagem;" he liked to deceive his friends, and doubtless in many cases he deceived himself. No writer ever expressed more exalted sentiments, but his virtuous aspirations were too often confined to couplets and to letter-writing. Faults such as these—and they are by no means venial faults—must be acknowledged by all students of Pope. They will find in his poems what Mr. Ruskin calls "a serene and just benevolence," and "the most lofty expression of moral temper;" but the prevailing tone of his verse bears another character, and the impressiveness of his finest lines is due to the venom of the satirist, and not to the high thinking of the philosopher. It would be unjust, however, as a great critic has said, to estimate illustrious men solely by their defects; and it would be especially unjust in the case of Pope, whose failings were probably due in large measure to physical causes. His life was one long disease, and a highly sensitive temperament was linked to a crazy body. On the other hand, it is to Pope's honour that he never fell into the indolent habits of the valetudinarian. His courage was indomitable, and the high position he won in literature was gained despite the impediments of an alien faith, of a comparatively humble position, and of an imperfect education. Before he was thirty years

old he was the most distinguished poet and man of letters in England, and men of the highest rank and reputation were proud to be numbered amongst his associates. And it deserves to be remembered that there was no servility in Pope's friendship. If he "dearly loved a lord," and cultivated the acquaintance of peers and statesmen, there is no indication that he forgot his own dignity ; and none of the friends whom he honoured, whether titled or untitled, were ever neglected in his verse. Nothing, indeed, can be more graceful than the art with which, in a line or word, he has embalmed their memory ; but it must be admitted that he has exercised even greater art in pillorying the men who incurred his enmity. To offend Pope was to run the risk of an unenviable notoriety, and of being "hitched" into rhymes that genius has made immortal. And the spite which, as in the well-known case of Addison, produced the satire was generally more obvious than the provocation.

Pope's early aspirations after fame were combined with an almost feminine desire for friendship, and he seems throughout life to have been morbidly conscious that he needed support and sympathy. When he was a mere youth, "lisp[ing] in numbers," Sir William Trumbull, a veteran statesman, made his acquaintance, and the old man and precocious boy became fast friends. Sir William gave the young poet wise advice, and introduced him to Wycherley, which, as it turned out, did not prove a wise step ; and through "manly Wycherley," as Pope calls him, he made the acquaintance of "knowing Walsh," a small poet, but a critic of some reputation. Henry Cromwell, another man of mature age, and recognised as a wit, who had known Dryden, seems also to have patronised Pope, and the stilted correspondence that passed between them may still be read with advantage. We need not look too closely into the poet's intimacy with men old enough to be his father. Pope soon learnt to feel his own superiority to his early patrons, and in the case of Wycherley expressed it too bluntly. His genius, indeed, matured so rapidly that a short time sufficed to place him on a level with men who are still the greatest ornaments of a great literary age—with Addison and Steele, with Swift and Congreve, with Arbuthnot and Bolingbroke. As a Roman Catholic, Pope might be suspected of a leaning to the Jacobites, but he was, as he once wrote to Caryll, "the least a politician in the world," and his estrangement from such notable Whigs as Addison and Steele was not due to political causes. In the early days of authorship Pope addressed both these delightful humourists in a strain of the warmest affection. The friendship of Addison was, he said, one of his "best comforts ;" and writing to

Steele of diminutives used in Latin as marks of affection, he adds, "I should myself be much better pleased if I were told you called me your little friend than if you complimented me with the title of a great genius." These expressions are not worth much, and there are no indications that Pope's regard either for Addison or Steele was at any time sincere.

There was one friendship of those early days which knew no break, and lasted for a quarter of a century. Pope's love for Gay, whose acquaintance he appears to have made through Henry Cromwell, was as genuine as the poet's affection for his mother. Every one, indeed, loved Gay, who, to use a vulgar phrase, was no one's enemy but his own; and Pope took him to his heart almost as soon as the two became acquainted. Gay's gentle, social nature readily received impressions from Pope's stronger intellect, and what he felt he uttered with a generous impulse. Never, surely, was poet flattered with more graceful art than that which Gay lavished upon his friend in the famous poem written "on his completing his translation of Homer's 'Iliad.'" Pope loved his fame even more than his friends, but this noble tribute must have served to strengthen both fame and friendship.

There was no sense of rivalry here, but there was a sympathy of taste and of pursuit, and that contrast of disposition which adds a zest to friendship. Swift as well as Pope loved Gay, and there is nothing pleasanter or apparently more sincere in the correspondence between them than their allusions to this common friend. They laugh at Gay for his love of luxury, for his eagerness as a courtier, for his idleness, for his incapacity to manage his affairs; but the laugh is always a kindly one. Pope describes him as sprinkled with rose-water; and Swift writes, "I suppose Mr. Gay will return from the Bath with twenty pounds more flesh and two hundred less in money. Providence never designed him to be above two-and-twenty by his thoughtlessness and cullibility. He has as little foresight of age, sickness, poverty, or loss of admirers as a girl of fifteen." And Gay seems to have been as sensitive as a girl. When one of his plays was prohibited by the Lord Chamberlain, he had an attack of illness; and when he lost the fortune he had won in South Sea stock, the disappointment nearly cost him his life. Gay found, as Spenser found long before, "what hell it is in suing long to bide." "Oh that I had never known what a court was!" he exclaimed; and it was when oppressed by the vanity of his labour as a courtier that he penned the melancholy couplet he intended for his epitaph. When Gay was buried in Westminster Abbey, "as if," said Arbuthnot,

"he had been a peer of the realm," Pope lamented that "one of the nearest and longest ties" of his life was broken "all on a sudden."

Gay belonged to what Mr. Elwin significantly calls the "inner circle" of Pope's friends ; and we have frequent glimpses of his fat figure at Twickenham and at Dawley, where Lord Bolingbroke, as Pope told Swift, laboured to be unambitious, and laboured in an unwilling soil. Knowing Bolingbroke as we do, it seems ridiculous to read of his aping the life of a farmer, sitting among the haymakers, and dining off mutton broth, beans, and bacon. When Pope was at the height of his fame Bolingbroke was one of his most intimate associates, and the influence of his mind upon that of the poet is seen in the "Essay on Man." For at least ten years the friends were constantly together, and both at Dawley and at Twickenham the first wits of the age were accustomed to assemble. To both houses Voltaire found his way, and so did Peterborough, who "had seen more kings and postillions than any one in Europe ;" and "mitred Rochester," who would nod the head in approval of the poet's lays ; and Bathurst, who lived to see his son Lord Chancellor, and to sit under the shade of the trees which he and Pope had planted ; and Arbuthnot, who could do everything but walk ; and Swift, the poet's dearest and greatest friend, whose praise made, as he said, his studies happy and their author happier. Great, one would think, must have been "the feast of reason and the flow of soul" when men such as these conversed across the walnuts and the wine ; but it may be doubted whether Pope was a very genial host, for Swift has a gentle sneer at him for stinginess about wine, and observes that he was a silent, inattentive companion. He said himself that, though he loved company, he loved reading better than talk. Moreover, he never laughed heartily ; and the man who cannot laugh is not likely to enliven conversation.

In the later years of his life Pope found a new and zealous friend in Warburton, to whose ingenuity he was indebted for defending the doubtful orthodoxy of the "Essay on Man." Warburton, superficial in knowledge and dogmatic in argument, seems at one period to have thought meanly of Pope's genius, and especially of his famous Essay. A change of opinion or of policy led him, however, to defend the poem, and Pope discovered that he was the greatest critic he had ever known. They met for the first time in Lord Radnor's garden at Twickenham, and Dodsley the bookseller, who was present, told Dr. Warton he was astonished at the high compliments paid by Pope to Warburton. The acquaintance, of course, soon became

intimate. "I passed about a week at Twickenham," Warburton writes, "in a most agreeable manner. Mr. Pope is as good a companion as a poet, and what is more, appears to be as good a man."

Neither poet nor divine was chary of compliments. Pope told Warburton he had a genius equal to his pains, and a taste equal to his learning; and Warburton told Pope that he was unrivalled in uniting wit with sublimity. "Your wit," said he, "gives a splendour and delicacy to your sublimity, and your sublimity gives a grace and dignity to your wit." What Warburton meant he might have found it difficult to explain; but if his object in flattering the first author of the day were worldly advancement, he had his reward. Through Pope's introduction to Allen—"humble Allen," who did good by stealth and blushed to find it fame—Warburton gained a wealthy wife, and ultimately the bishopric of Gloucester. How he hated Bolingbroke, and how Bolingbroke hated him, and how, metaphorically speaking, they came to blows over the dead poet's grave, it does not fall within the scope of this paper to relate. Unfortunately, the memory of Pope himself did not escape in the *mêlée*, and the words of affectionate regret uttered by Bolingbroke at the bedside of the dying poet were sadly belied by his after conduct. These words, in which Bolingbroke speaks with sensitive feeling of Pope's tender heart for his particular friends, are recorded by Spence, afterwards Professor of Poetry at Oxford. Spence, like Warburton, won the friendship of the poet by praising his poetry. His admiration was genuine, and it was a happy hour that brought Pope the acquaintance of so amiable a chronicler. Spence's "Anecdotes" are full of interest for all lovers of literature. He acted the part of a Boswell to his friend, but he was a Boswell in miniature. There is neither insight into character in his pages, nor any trace of the dramatic art which makes Boswell's narrative so delightful. He has, however, recorded in all truthfulness and simplicity a great many interesting facts and sayings, and, honest though he be, all he says is in Pope's favour. His affection for the poet was that of a son for his father; he was constantly with him in his dying hours, and seems to have watched over him with the utmost tenderness. Spence's love was not the less sincere because Pope, who knew as well as any man how to serve a friend, was eager to promote his interests. This is an honourable feature in Pope's character. Like Swift, he was always ready to speak and act for others, and in many cases his great influence was not exerted in vain. "When the hour of death comes," said Jeanie Deans to Queen Caroline, "it

is na what we hae dune for oursells, but what we hae dune for others, that we think on maist pleasantly ;” and Pope, faulty and tricky though in some respects he was, may have remembered then without pride or presumption how often in the hour of need he had been kind to such as needed kindness.

One of the worst features in his poetry is the low estimate he takes of women. In this respect his verse, like that of Prior, is essentially immoral. With the exception of the beautiful lines about his mother, which every lover of poetry should know by heart, there is no recognition in his works of the honour due to the weaker sex, and paid by all “finely touched” spirits. In his eyes, most women have no character at all ; their ruling passions are the love of pleasure and the love of sway ; “every woman is at heart a rake ;” and he cannot even praise the “bright nymph” whose lost lock of hair suggested an inimitable poem, without insulting her at the same time. Yet there can be little doubt that one of the most faithful friendships of Pope’s life was with the “fair-haired” Martha Blount. It was an early friendship, with a dash of sentiment about it, that might, under happier circumstances, have ripened into love. And it was a perfectly intelligible friendship. There may be, as Mrs. Oliphant has well said, a love between man and woman which does not point to matrimony, and there seems no ground for the scandal that assailed the life-long intimacy of Martha and the poet. There was not, indeed, much delicacy in their intercourse, but the coarseness of the age was extraordinary, and men and women of fashion sometimes wrote to one another in language that could not now be uttered in respectable society. Pope’s relation to Martha resembles, in some respects, Swift’s relation to the unhappy and more celebrated “Stella ;” but while the reader, thanks to Swift’s inimitable “Journal,” soon learns to know Hester Johnson, he never gains more than a shadowy acquaintance with Martha Blount. In his early days Pope seems to have felt an equal affection for Teresa, the elder sister ; but at a later period, from some doubtful cause, there was a complete estrangement between them. In his correspondence with Caryll, who was Martha’s godfather, Pope accuses Teresa of cruelty to her mother “beyond all imagination,” and of an intrigue with “a gallant ;” but the story, in Mr. Elwin’s judgment, is unworthy of credit, since we have no proof of its truth beyond the word of Pope. Both sisters, by the way, were considered beautiful in their youth, but neither of them married. We do not know that “Mrs. Patty” ever had an offer, and it is possible that her undefined connection with Pope destroyed her matrimonial prospects. If the glimpses we gain of her are slight, they are

always attractive, and in the Pope correspondence all the poet's friends seem to have a good word for Patty. Swift writes to her that he will stand by his dear Patty against all the world, and hopes to find her, when they meet, a fine, healthy, plump lady. "If Mr. Pope chides you," says the Dean, "threaten him that you will turn heretic;" and he adds, "Adieu, dear Patty, and believe me to be one of your truest friends and humblest servants; and that, since I can never live in England, my greatest happiness would be to have you and Mr. Pope condemned during my life to live in Ireland—he at the deanery, and you, for reputation's sake, just at next door, and I will give you eight dinners a week and a whole half-dozen of pint bottles of good French wine at your lodgings, a thing you could never expect to arrive at." Martha Blount returned Swift's affection, and was, as Pope told the Dean, "as constant to old friendships as any man;" and, in another letter, Swift is told that she speaks of him constantly, and "is one of the most considerate and mindful of women in the world towards others, the least so in regard to herself." "She never neglects a friend ill or absent," is another statement made by Pope; and we quote it with the more satisfaction because it serves to strengthen one's disbelief in the amazing and wholly unauthenticated story that Martha neglected Pope in his dying hours. Who that knows the faithfulness and self-sacrifice of a woman's love can believe that a friendship which was the growth of years, and had stood the brunt of many a storm, could have thus failed in the supreme hour of trial? It is certain that Pope's affection continued warm to the last, and Warburton relates that during the poet's illness "Mrs. Blount's coming in gave a new turn of spirits or a temporary strength to him."

Readers familiar with the literary history of Pope's age will find it impossible to forget the men whom the poet loved and honoured. The name of Bolingbroke reminds us not only of a famous statesman and politician, but of the "guide, philosopher, and friend" who taught the poet—

Happily to steer
From grave to gay, from lively to severe.

We take up Arbuthnot's "John Bull," one of the wittiest productions of a brilliant age, and remember the masterly "Epistle" in which Pope celebrates the "art and care" of this famous physician; and how, in the "Satires" that follow, he recognises gratefully the special skill of the most celebrated doctor and of "the most noted and most deserving man in the whole profession of chirurgery,"—

I'll do what Mead and Cheselden advise
To keep these limbs and to preserve these eyes;

We recall too his praise of the "blameless Bethel"—

Who always speaks his thought,
And always thinks the very thing he ought—

and of "well-natured Garth," himself a small poet as well as a sound physician, who, when Pope was young and unknown, took him kindly by the hand. And we do not forget, what is greatly to Pope's credit, that he could esteem and celebrate the ministers of a church to which he did not belong; how pleasing he found "Atterbury's softer hour;" how he discovered "manners with candour" in Benson, a "heart" in Rundel, and in the far-famed Berkeley "every virtue under heaven."

These names are but a few among many of men who, apart from their own worth, will "live with the eternity" of Pope's fame. If, as Mr. Pattison observes, Pope's satire is an expression of genuine feeling, it is well to remember that to the poet's warmth of feeling is due also the praise so generously lavished on his friends. It was surely no slight privilege to be the associate of a man who delighted to bestow upon those whom he held in honour an earthly immortality.

JOHN DENNIS.

SCIENCE NOTES.

THE ORIGIN OF THE SALT OF THE SEA.

SONNENSTADT has found that the water of the ocean contains gold in solution, and he estimates the quantity at $\frac{9}{10}$ of a gramme (about 14 grains, troy) to every ton of sea water. Many years ago silver was found in sea water, in spite of the apparent insolubility of its chloride. Minute analysis, when exhaustively applied, appears to bring out from sea water any and every element thus sought for.

Many authors have treated the saltiness of the sea as a great physical mystery, but a few simple considerations will, I think, prove pretty clearly that there would be far more reason for wonderment if the sea were composed of fresh water.

The ocean covers the lower valleys of the earth, and the land generally slopes towards it. It thus receives nearly all the drainage and washings of the exposed surface of the earth. Some of the materials of the solid earth are readily soluble in water, none are absolutely insoluble. Therefore the rain that falls upon the earth must exert its solvent power, must take up as much as it can of whatever it meets on its way downwards, and carry this dissolved matter into the general receptacle. When the water leaves the ocean again by rising as vapour, it does not carry the dissolved earthy matter with it, but is distilled as pure water to fall again and re-enter the ocean as river water, or water more or less hardened by the matter it has dissolved from the earth.

Thus every river or streamlet that pours into the sea carries with it fresh contributions of salinity, and this having gone on as long as the surface of the earth has consisted of land and water, the saltiness of the ocean is but a natural and necessary matter of course.

This view of the origin of the saline matters dissolved in the ocean is confirmed by an examination of other bodies of water similarly related to surrounding land, *i.e.* of lakes which occupy hollows in the land and receive the inflow of a river or rivers without having any outlet but that which is due to evaporation.

Such model oceans are especially abundant on the great table-land of Asia, extending northward from the Himalayas and their eastward extensions, to the Altai and the general ridge which forms the watershed of the great rivers of Russia ; that vast region where the Chinese, Russian, and British Empires meet, and which has been aptly named "The Roof of the World." The boundary mountains forming the ridge of this roof or plateau, slope outwards to the sea and inwards to the great elevated basin, the bottom of which is from ten to fifteen thousand feet higher than the sea level.

The "thousand and one" rivers and rivulets that flow inwards all terminate in small self-contained seas, that have no other outlet than by evaporation. Thus all the soluble contributions of the rivers remain, and all these pools are salt lakes of varying density, some even more saline than the ocean itself. A detailed map of this wild country displays a number of tadpole-like delineations, or bags with strings attached. These are the shut-up salt lakes and their tributary rivers.

The salt deserts around some of these lakes indicate former extension of their waters, which probably were united, and formed a great Asiatic Mediterranean Sea during the Glacial epoch, when there was more rain and less evaporation on the Northern Hemisphere, than at present.

The Sea of Aral and the Caspian are but larger examples of the same series. The saltiness of these is commonly cited in evidence of their former continuity with the ocean, but if I am right it really affords no such evidence at all, as these inland seas would be salt whether they were portions of the main ocean or independent little oceans, *i.e.* ultimate receptacles of river water and all that flows with it.

The Dead Sea, which receives the Jordan at one end and a multitude of minor rivers or rivulets from all its other sides, is the best-known example of a saline ultimate receptacle of river waters. This, as everybody knows, is a sea or lake of brine. Its redundancy of saline matter is at once explained by the above hypothesis, seeing that it is situated in a region of great evaporation, and that it receives the drainage of a disproportionately large area.

The total area of land draining into the great ocean does not exceed one-fourth of its own area, while the Dead Sea receives the drainage and soluble matter of an area above twenty times greater than its own.

It would extend this note too far to describe in detail the saline constituents of the ocean, but I may state generally that each

particular base and acid is there found to exist in a proportion nearly corresponding to the general solubility of its ordinary compounds; showing that the rain water in its course over the earth carries down into the sea the most soluble materials of the land and leaves them there; and that therein lies the whole mystery of the salt water.

UPROOTING HAIRS BY ELECTRICITY.

THE electric mania seems to be rather severe at present. It is amusing to observe the faith that is popularly given to this agent, a faith which seems to depend upon its supposed mysteriousness, and which therefore is likely to be proportionate to the ignorance of the believer. If ever I can find time to do so, I purpose publishing some "Curiosities of Patent Specifications," and the oddest of these will relate to applications of electricity and magnetism.

An American physician has lately published an account of his electrical method of removing superfluous hairs, such as female beards or moustachios. Each individual hair is first grasped by a pair of forceps, and "a three-cornered needle with a suitable handle and sharp cutting edges" is thrust into the follicle, or "root" of the hair. This needle is connected with the negative pole of a battery, and a sponge attached to the positive pole is placed at the back of the victim's neck, so that the current shall pass through her head. "A few bubbles of viscid froth appear," the needle is rotated a few times, the hair becomes loose and is then easily withdrawn, never to return. The next hair is similarly treated, and so on. The sensations are described as "slightly disagreeable."

THE UNIVERSALITY OF METEORITES.

I HAVE often been surprised at the number of intelligent Englishmen, especially Londoners, who have visited the British Museum without noticing the magnificent collection of meteoric stones which it contains. They are now removed to South Kensington. It is not so very long ago since the idea of stones falling from the heavens was regarded by philosophers as a popular myth. The first man of any recognized scientific standing who dared to support the popular traditions was Chladni, who published a tract at Riga and Leipzig in 1794, in which he collected evidence to prove that the mass of native iron found by Pallas in Siberia had fallen upon the earth, and that the traditions of other stony masses

falling from the clouds were no fables. Two years after this a stone weighing about 56 lbs. was exhibited in London, and was said to have fallen at Wold Cottage, Yorkshire, in December, 1795; but in spite of the attestation of several respectable witnesses the story received the same treatment as is now bestowed on any description of the sea-serpent.

Sir Joseph Banks ventured to observe that there was a curious resemblance between the Yorkshire stone and another that had been sent to him from Italy, and which was stated to have fallen with several others near to Sienna in July 1794. In 1799 he received specimens of stones that were said to have fallen near Benares in India, and these so closely resembled the Yorkshire stone that the scepticism began to waver. But it was not until after the publication of a paper read by Howard at the Royal Society in 1802 that meteoric stones were fairly admitted into good scientific society.

They are now not merely recognised as occasional stray visitors that drop upon our earth, but are regarded as forming an element of the solar system comparable in physical importance to our world itself.

They are supposed to be arranged in a multitude of zones, each comprising millions, or even millions of millions, of fragments, each fragment travelling round the sun in an orbit of its own, and held to its path by the same forces of momentum and gravitation as those which regulate the orbits of the most gigantic of the planets.

Besides these lumps of nearly pure iron, or of iron mixed with earthy matter, which strike the earth occasionally with a heavy thud and bury themselves in the ground by the force of their fall, there are minor visitors falling so frequently that our atmosphere is never free from them.

There are microscopic particles of iron having a composition similar to the lump in Siberia, which originally weighed about 1,400 lbs., or that of Ensisheim which weighed 270 lbs., and was suspended by an iron chain in the church, and treated with scientific contempt for upwards of three centuries. The microscopic meteorites are usually spherical, and show signs of having been melted. The larger bodies also have been melted originally, and then re-melted on their surfaces by the heat which their collision with our atmosphere has evolved.

Meteoric dust is found more or less peppered over all those parts of the earth's surface that have been undisturbed by agricultural operations or storm-floods, and have not been covered by vegetable *débris* or other deposit. It is found on the roofs of buildings,

and similar places. A few years ago a philosopher examined the dust that rests upon the ledges of the towers of the Cathedral of Notre Dame, and found these spherical grains mingled with it.

The Desert of Sahara presents one of the best available sites for the superficial retention of such microscopic material falling from above, and there it is found accordingly; the chemical composition as well as the form and fused appearance of the spherules proving their meteoric origin. Sacchini has recently examined the dust showers that visit Italy and Sicily, and finds that they contain spherical grains of meteoric iron similar to those of Sahara.

He supposes that they are actually brought from Sahara by cyclones; but, without denying the possibility of this in some instances (such as during the curious sand-rains that accompany violent wind-storms in Italy and Sicily), I see no reason for assuming that Sahara has any selective, magnetic, or other power of drawing to itself more of these granules than are due to a corresponding surface of the Italian peninsula and islands, though there are good reasons why they may be more easily preserved for collection in the dry sands of the desert.

The modern view of the universe is that it consists not merely of suns, planets, satellites, and comets, but that celestial space is peopled with masses of matter of all sizes, from the mightiest of suns to particles so small as to evade the reach of our unaided senses, and possibly even so small as to escape our microscopic searchings.

THE GEOLOGICAL AGENCY OF METEORITES.

IF what I have stated above concerning the universal distribution and continuous showering down of meteoric particles be correct, we ought to find evidence of their deposition on the surface of earth during all periods of its history. If Middlesex receives as much meteoric iron dust—surface for surface—as Sahara, we should be able to find evidence of this, even though the spherical grains be disturbed by the plough and oxidised by the humidity of the soil.

My readers may easily test this for themselves. Take up a handful of soil from the surface of any part of England or any other place in the world, moisten it with sulphuric, hydrochloric, or nitric acid, and then pour on it a solution of yellow ferrocyanide of potassium (prussiate of potash). The soil will become stained with a deep Prussian-blue colour, and the liquid that runs off will show the same in solution.

This proves the presence of iron. Not only does it exist thus universally diffused throughout the soil on the present surface of the earth, but it is similarly ubiquitous in all the rocks which have been deposited in the lakes and estuaries and sea-shores of the ancient world at all geological periods. Other metals, or compounds of metals, are found accumulated here and there in veins or lodes, or in bulky masses forming special rocks, but iron, besides forming the special deposits we know as iron ores, is sprinkled everywhere. A deposit of sand nearly free from iron is so rare that it is more valuable than a gold-mine, on account of the high price that the glassmaker is willing to pay for such a rarity. The prevailing colour of the mineral surface of the earth is due to this general tinge of iron.

Long ago, in my lectures at the Midland Institute, I attributed this universality of such traces of iron to its continuous falling upon the earth as meteoric dust, and this hypothesis is now becoming rather widely accepted. It has suggested itself independently and originally to the minds of many others. The more I reflect upon it, the better satisfied I become of its soundness.

There is one of our companion worlds, the planet Mars, with which we have some rather intimate acquaintance. It is nearest to us when in opposition, when the sun shines fully on the side presented to our view ; sufficiently near to enable us to trace the boundaries of its oceans and seas, continents, islands, and peninsulas ; to watch the spreading of its polar snows as winter advances, and their dissolution and recession with the progress of the Martial summer. Indications of the fall of mighty avalanches have even been observed.

It is a curious fact that the land of this planet is tinged with exactly that colour which would be given by iron dust mingled with material similar to our sandstones more or less oxidized.

FREEZING TRICHINÆ.

I HAVE a suggestion to make in reference to those objects of current terror the *trichinæ*. We know that they are killed by a high temperature, but no experiments appear to have been made to test their powers of enduring low temperatures. Can they survive the freezing of the juices within and surrounding their cysts ? If not, the Frozen Meat Export Company will have an important advantage in reference to Chicago hogs ; and it may be worth the while of some of the people interested in this extensive commerce to investigate the subject.

OZONE AND THE BLUE SKY.

EVER since Schönbein gave the name of *ozone* to the gaseous something which produces the peculiar odour that is observable when electric sparks pass through dry air or dry oxygen, its constitution and properties have been subjects of controversy. It is now fairly established as oxygen in a state of excessive activity—oxygen with all its special oxygen properties exaggerated. Sober oxygen does not attack silver, allows the petals of flowers to retain their colours, does not annoy the chemist by corroding the corks or India-rubber joints of his apparatus ; but this ozone, or intoxicated oxygen, performs all these vagaries and many others, some of them very puzzling. When heated to a little above the boiling point of water it becomes perfectly sober again in an instant, its curious smell disappears, and all its exaggerated activities cease.

It acts as a disinfectant, and appears to stimulate animals that breathe it. It has given origin to many physiological theories, one of which is that the peculiar action of sea breezes on certain constitutions is due to the sea air containing more ozone than ordinary inland air. Thus a patient on the brink of death from pulmonary consumption may prolong life by remaining out at sea. I sailed from Constantinople to London in a small schooner with one fellow-passenger, who was a poor fellow brought on board in a dying state at Pera. His condition improved as soon as we got fairly out into the Sea of Marmora, and he held on equably during a tedious voyage of two months, but sank immediately he landed at Blackwall, and died three days afterwards. This has been attributed to the rapid oxidation or disinfection of the diseased surface of the air cells, or of the tubercles in the lungs.

Mr. Hartley, of the Dublin College of Science, has for some time past been engaged in a series of very interesting researches on atmospheric ozone, that lead him to conclude that the blue tint of the sky is due to the ozone it contains.

Hautfeuille and Chappuis discovered that ozone is a blue gas, and many determinations have been made of the proportions in which it exists in the atmosphere. The investigation is difficult and the results are but approximate. They show a variation from a maximum of $\frac{1}{10000}$ part by volume to about one-fourth of that small quantity.

Mr. Hartley charged a tube with about as much ozone as is contained in a column of air of the same size as the tube, and upon

looking through the tube lengthwise found that the transparent gas it contained exhibited a rich azure tint, as deep as that of the bluest sky in the most brilliant weather. He also finds that the ozone thus imprisoned absorbs the rays of the spectrum in the same way as we are justified in concluding that the atmosphere absorbs and cuts off the corresponding solar rays.

From a large number of observations made at different times and places, it appears that there is a greater proportion of ozone in the upper regions of the air than near to the surface of the earth at sea level. This conclusion of Mr. Hartley's is quite in accordance with the experience of all of us who have carried a knapsack. We all know that the mountain air is far more exhilarating than that of the valley or low level plain. I have frequently found that the languor of a half-day's walk on low ground has vanished on climbing and crossing a mountain pass, in spite of the effort of the ascent. Such experience also accords with the general hypothesis which attributes great stimulating or vitalising action to ozonised air.

Another curious fact, brought out by the researches of various observers, is that the quantity of ozone in the atmosphere is greatest during the prevalence of W. and S.W. winds, and least during those from the E. and N.E. The difference is very considerable, about three times as much on the average between S. and W., as compared with the points between N. and E. The W.S.W. wind bears with it about four times as much ozone as the E.N.E. This may account for the proverbially depressing influences of the east winds.

I must reserve for a future note some speculations concerning the sources of atmospheric ozone.

ALCOHOL EVERYWHERE.

AT a meeting of the French Academy of Sciences in March a M. Muritz read a paper which must be almost exasperating to those Good Templars who believe that the smallest taint of alcohol is poison to the blood. He has devised a very delicate test for alcohol by converting it into iodoform, and is thus able to detect it in water containing only one millionth part.

He finds it in nearly all natural waters, and even more in snow than in rain water ; the latter contains one gramme ($15\frac{1}{2}$ grains) per cubic metre ; the water of the Seine the same quantity. As a cubic metre of water weighs about a ton, the drinkable quantity is infinitesimal. By reference to my first note in this number the Good Templar will see that it barely exceeds the proportion of gold in sea water.

Rich soils containing much decaying vegetable matter are charged with a considerable quantity of alcohol, and, generally speaking, it is most abundant wherever vegetable decomposition is proceeding, this being doubtless its source. That which is found in rain water is apparently obtained from the alcohol vapour in the air which the rain absorbs while falling.

SCIENTIFIC APPLICATIONS OF LUMINOUS PAINT.

IN various astronomical instruments it is necessary to make measurements, or to indicate precise positions within the field of vision, or inside the tube of the telescope. Thus, in the transit instrument, spider-webs or fine wires are stretched across the inside of the telescope just in the focus of the eyepiece, and the crossing of these by the image of the star has to be accurately noted. In order to render these wires visible the axis of the instrument is made hollow, and a beam of light is thrown through it from a little lantern, and so reflected as to illuminate the spider-webs or cross-wires.

Micrometer and other scales have to be similarly used in other observations, and illuminated by some such device.

During the past year (since March 1880) Balmain's luminous paint has been successfully applied to some of these purposes at the Greenwich Observatory. In the spectroscopic examination of the motion of stars, which demands the measurement of very minute displacements of certain fine lines in the spectrum of the star, the pointer of the micrometer, by means of which the comparison between the normal and displaced line is effected, has been coated with this paint, so that the pointer appears as a luminous line between the star line and the line of comparison. This and other similar uses of the fluorescent light have been found better than artificial light reflected to the micrometer scales, &c.

Luminous photographs are made in Vienna by simply printing the picture on a transparent paper which is backed with the luminous paint. The light from this is intercepted by the silver deposit in proportion to the thickness or density of that deposit, or otherwise stated, in proportion to the depth of the shades and half-lights of the picture, and thus a shadowy phantom picture is visible in the dark.

THE MUSCULAR STRENGTH OF INSECTS.

THE muscular power of insects has often been noticed, and curious calculations may easily be made by comparing the leap of a flea to its stature, and supposing that a man could make a

proportionate bound. Given $\frac{1}{16}$ of an inch as the height of the flea, and 6 inches as that of his jump, he would clear an obstacle 60 times as tall as himself. At this rate, a man 6 feet high would be able to jump over the Great Pyramid.

Dr. Theobald, of Maryland, finds that a beetle weighing two grains is able to move a weight of $5\frac{1}{2}$ ounces, or 1,320 times its own weight. A man weighing 150 lbs., if proportionally strong, could thus move 198,000 lbs., or nearly 100 tons.

Some years ago I captured a very handsome beetle, and placed it under a beaker on a shelf of my laboratory. A few hours after the beetle had disappeared very mysteriously, the beaker remaining inverted. He was recaptured and again placed under the beaker (which, I should perhaps explain, is a thin tumbler used in chemical analysis). I watched the result, and presently found that the beetle walked the tumbler along the shelf till it reached the edge, then crept out and fell as soon as the overhang was sufficient to afford room for escape.

A VERY HARDY VINE.

A FEW months ago a new variety of vine was exhibited at the Horticultural Society of St. Petersburg by M. Wolkenstein. It is so hardy that it grows and its fruit ripens at Warsaw and Riga. M. Wolkenstein thinks it may even yield ripe fruit at St. Petersburg. If so, it will surely thrive in England, and is worth the attention of our horticulturists. I have been looking out for some account of its introduction to this country, but having met with none, note it here, as a paper read at the Russian Society last autumn may have altogether escaped the notice of our practical agriculturists.

If a hardy vine can be procured by natural or artificial selection, its cultivation in this country may become an important source of wealth. The phylloxera is spreading throughout the continent of Europe by slow creeping migration; burrowing and furrowing all ordinary soil, and checked only when it encounters loose dry sand which fills up its tunnels and cuttings.

As it cannot cross the Channel, our cornfields may be converted into vineyards, and we may supply our French brethren with wine in exchange for the wheat of Burgundy and Bordeaux, if we can only obtain a suitable variety of vine. We have acclimatised many plants that came originally from warmer countries than France.

W. MATTIEU WILLIAMS.

TABLE TALK.

IT is difficult to say whether two months of steady east wind or an occasional visitation of mistral is the more endurable misfortune. Year by year the rigours of the east wind seem to augment, and the conclusion that some deplorable change has taken place in our climate is being forced upon us. Vegetation of every kind during the last month was at least a fortnight behind that of a dozen years ago at a corresponding period. Meanwhile, from Provence I hear of the mistral upsetting a railway train. This is a feat of which any wind may be proud. In Avignon I heard the mistral spoken of as the English wind, and the proverb employed in the South of France generally is four hundred years old, that "from England comes neither good man nor good wind." This refers to the time when the district then known as Aquitaine, including many French provinces, was in the possession of England. The mistral, which ordinarily blows from the north-west, comes directly from that region. Those accordingly who paid our winds a tribute, the full justice of which we are in a position to estimate, referred only to our continental possessions, and were without experience of the real power of the English wind. "It levels everything," was the laconic answer of a South Rhone vine-grower of whom I asked a question as to the effects of the mistral. I doubt, however, if its malignity or its maleficence is greater than that of the wind which with us is the harbinger and companion of the spring. Still, the fact that projected improvements in the port of Marseilles are opposed in the French Chamber because the harbour which is open to the mistral can never be safe, affords pretty convincing proof of its capacity for mischief.

ONCE more in Parliament and in the press the question of the safety of audiences in the case of fire is being mooted. A shock has been administered by the terrible calamity at the Nice Opera House, and the kind of pother stirred by the Brooklyn catastrophe is once more raised. Yet nothing whatever will be

done. Since the "holocaust" at Nice, I found myself in a West-end theatre, at which the performance lasted so long that I was compelled to depart before its close. Knowing that there was an exit from the stalls directly into the street, I went at about half-past eleven o'clock to avail myself of it. *The door was locked*, and the man who kept the key had to be sought. He unlocked the door for me, and I found it opened inwards from without. Now, this is the result of our Lord Chamberlain's interference. A door specially prepared as an exit in case of alarm exists under such conditions as render it a cause of danger rather than of safety. Can anything in the world be more English or more illustrative of the management of Red Tape?

LET me suppose an alarm of fire to be given. 'Those in the vicinity of the door rush to it. Others behind them tread closely on their heels. The door is reached, and proves to be locked. Supposing—a most unlikely supposition this—that the key can be passed along the crowd, over the heads of fainting women, till it reaches those nearest the door. With a mad crowd behind, the foremost men cannot insert it in the lock or open the door when it is unlocked. The only chance of escape consists in carrying the door off its hinges. While Sir William Harcourt states in the House of Commons that the "managers are held by their licenses personally responsible for the safety of the public," and Mr. Hollingshead writes to the newspapers to show that public alarm is causeless, this state of affairs prevails—a state of affairs which means that, in case of a serious alarm of fire at this theatre, a terrible loss of life is inevitable.

MEANWHILE, to add to the comfort of those visiting our theatres, it has to be remembered that one is in a cellar; and that if the building above took fire, the audience would be roasted alive, as the Red Indian roasts his game, under the earth, or meet a fate such as Harrison Ainsworth describes in his "Old St. Paul's." In a second theatre the means of exit pass along a corridor under another house. A third has under the same roof with it a hospital, and is so close to it that, as I am told, the noises, gay or dolorous, made in one house can be heard in the other. What is to become of the patients in the hospital if the theatre should take fire? I make bold to say that a theatre should be an isolated block, free from all contact with any other building, and offering, like the great theatres and amphitheatres of ancient times, exits or vomitoria in all directions. Until this is done the so-called

supervision exercised over theatres is a characteristically English delusion and sham.

I TASTED quite recently some of the first oranges that reached London from the Southern States of America. They are distinctly superior in size and flavour to the oranges which are sent us by Spain and Portugal. It seems probable that a new and highly remunerative branch of commerce will be established between England and Florida. A still greater marvel is promised me in the shape of a consignment of fruit from San Francisco, which I am told can be sent with perfect safety. Apart from the advantage of multiplying our sources of supply, the proposed scheme of conveying fruit from America to the London market will enrich our tables with many succulent and delicious novelties.

I T is too early for the crop of Census stories we may shortly expect. There is, however, but too much cause to fear that a national undertaking, the cost of which is very heavy, will be indecisive. In addition to the complaints which have appeared in the newspapers, concerning the neglect of suburban streets, I hear of men living in residential chambers in central districts who have been entirely ignored. It is true that the agents have had a difficult time of it in some quarters. A mild inquiry on the part of one official, at the chambers in the Temple of an eminent lecturer and counsel, as to whether the tenant proposed to sleep in chambers on Sunday night, was misconstrued and almost led to an act of violent and "summary ejectment." A tendency, easily explicable, to exaggerate the number of omissions, by treating as reports of different cases slightly altered reports of the same case, of course exists. Still, with all allowance for this source of misstatement, there appears reason to fear that the results will be less conclusive than was hoped and anticipated.

A MONG the shams of the day, one of the most conspicuous is found in the French curriculum for the Oxford and Cambridge Local examinations. This, I am instructed on the highest authority, would be held extravagant in the case of pupils in French schools, and in that of English pupils, both male and female, it is simply preposterous. Among the books in which the English student is to be examined are the "*Roman de la Rou*" and the "*Œuvres de Tabarin*." To those unfamiliar with these works it will be enough to say that the experiment is about analogous to that of supplying French

pupils with examination papers in the "Vision and Creed of Piers Plowman" and the jest-book known as "A Hundred Mery Talys." One French examiner after another has uttered his protest against the absurdity—for which no reason whatever, and no cause beyond pedantry in those in high quarters, can be advanced.

AT a time when we are admitting women to the degree of physicians and placing them upon School Boards, and when they are asking to be admitted into Parliament and into Vestries, it is worth while considering whether we may not with advantage extend the sphere of their employment in educational matters. In Italy a certain number of the inspectors of female schools are women. Here is surely a step in the right direction. Men who can set girls to study Tabarin are but poor judges of female requirements. The charge of doing this is not, of course, brought against school inspectors. I mention it as a simple instance of masculine incompetence to provide for feminine wants. There are portions of tuition in female schools concerning which masculine humanity is profoundly and naturally ignorant. Fancy a man daring to pronounce an opinion upon plain sewing, or upon the mysteries of "knitting, netting, and crochet"! The employment of feminine inspectors would have the advantage, that the work—at a fourth of its present cost—would be done more thoroughly than now. One more of those occupations for women of which we are constantly in search would also be afforded. The scheme, I am told, works admirably in Italy. A glance at Mrs. Haweis's "Chaucer for Schools" is enough to convince any reader what qualifications for the task of school inspector a woman may possess.

THE new (April) number of the *Edinburgh Review* contains, in the form of a notice of Carlyle's *Reminiscences*, a bitter attack on the memory of one of the most illustrious of its old contributors. While the writer professes at the outset to be "especially anxious to pay his tribute of personal respect and regard," we do not require to read many sentences before we discover that he has dipped his pen in gall and venom, and that he wields it in the very spirit of detraction.

HERE are a few instances of the "respect and regard" which the reviewer, on behalf of the journal he represents, pays to the memory of the great author lately departed:—"When we proceed to a closer examination of his writings and his opinions, we

confess that we are astonished at the exaggerated estimate which has been formed of them." "He was singularly devoid of mental method and of logical power." "Much of his style might, without injustice, be said to consist of bad German translated into worse English." "These infirmities of temper had been greatly increased by the flattery lavished on him in his later years, *which he swallowed with avidity*." It is not a little edifying and amusing to listen to animadversions on bad English by a writer capable of perpetrating such slipshod phrases as the following:—"Throughout the book *scarcely a person is named, except his own family*, to whom he does not affix some scornful and opprobrious epithet" (p. 488). "His [Jeffrey's] crime was, it seems, not to be 'deep'" (p. 492); "an *atrabilious* temperament" (p. 495).

HIS acquaintance with the details of the book he is reviewing is displayed by his assertion that Carlyle's *Reminiscences* of his wife were written at Mentone: "There it was that he committed to paper these *Reminiscences* of her he had lost" (p. 493). They were written at Cheyne Row, months before he went to Mentone, where the "*Reminiscences of Irving*" were finished, and those of Jeffrey written. His general knowledge of his subject may be gathered from his evident impression that the "*Life of Sterling*" was *written* in 1852; whereas it was *published* in 1851 ("This was Mr. Carlyle's opinion of the land he lived in in 1852"—p. 474).

A PROPOS of Carlyle's "total insensibility to every form of art," the reviewer relates a somewhat apocryphal story how "when taken to York to see the Minster, he sat down near the gate of the nave, and exclaimed, 'What for did the puir bodies pile up all these stones?'" And he compares him unfavourably with Dr. Johnson, whose "recorded observations on an infinite variety of subjects all bear the stamp of absolute good sense;" whereas, it seems, according to him, "scarcely one of Carlyle's judgments on men and things will bear that test."

I N vindication of the memory of her mother and her step-father, Mr. and Mrs. Basil Montagu, which she conceives to be assailed in Carlyle's posthumous *Reminiscences*, Mrs. Procter, the widow of "Barry Cornwall," has printed for private circulation a little pamphlet of thirty-three pages, now lying before me (to which she has prefixed a brief but a bitter and angry Preface), entitled "Letters addressed to Mrs. Basil Montagu and B. W. Procter by

Mr. Thomas Carlyle." The letters, which are all dated from Scotland between the years 1825 and 1830 (after Carlyle's first, and before his second visit to London), are only five in number, but are of considerable length and interest.

Here is a piece of homely philosophy from one of them, which many of us would do well to lay to heart :—"We all start, I have observed, with the tacit persuasion that, whatever become of others, we (the illustrious all-important *we*) are entitled of *right* to be *entirely fortunate*, to accumulate all knowledge, beauty, health, and earthly felicity in *our* sacred person, and so pass *our* most sovereign days in rosy bowers, with distress never seen by us, except as an interesting shade in the distance of our landscape. Most, indeed, continue to the last to believe that in their lot in life they are *unjustly* treated. This class is certainly the most pitiable of all, for an action of damages against Providence is surely no promising lawsuit."

The last letter of the series contains a very graphic description of his lonely moorland home at Craigenputtoch, and of the scenery around :—"If London is the noisiest, busiest spot on the earth, this is about the stillest and most solitary. The road hither *ends* at our house: to see a lime-cart or market-cart struggling along the broken moor, till it reach grave land wheel-ruts, and scent the dominion of Commerce from afar, is an incident which we almost mark in our journals. *In this meek pale sunshine of October, in this grave-like silence, there is something ghostly*; were it not that our meadows are of peat-bog and not of asphodel, you might fancy it the abode of spirits, not of men and fleecy or hairy cattle. I have a rough broken path along the neighbouring hill-side, two miles in length, where I take a walk, and see over Ayrshire and Galloway, far and wide, nothing but granite mountains and idle moors."

IN one of the London evening papers there is a complaint over the monotony of our street nomenclature as compared with that of foreign cities. The extreme vulgarity of the names of streets in country towns is chiefly due to that worship of property and wealth which gave rise to the sneer of Bonaparte that we are a nation of shopkeepers. In the more stately portions of London we have recollections of those noble families who in remote days obtained possession of land, and we pass from the streets Cecil, Arundel, Salisbury, Norfolk, and Northumberland, of the Strand, to the squares, Russell, Bedford, Tavistock, and the like, of the west-central district, and Grosvenor, Berkeley, Cavendish, Portman, or Belgrave of the west.

So deep into our nature has this form of snobbishness sunk that in those districts even in which the property built upon does not belong to any aristocratic family it is necessary to treat it as though it did. Clarendon Roads, Norfolk Terraces, and Colville Gardens, constitute respectable addresses, and such multiply. If a man who is not connected with our landed aristocracy gives his name to a place in which fashionable influences do not obtain, he is still an owner of property. In this case we get names like Child's Court or Fullwood's Rents. We may well show our belief in the imputation of Napoleon, by taking constant pains to deny it.

I WISH we could have a species of street census, and learn at this moment what amount of tribute has been paid in our street nomenclature to departed greatness. Have we many Chaucer Streets or Raleigh Streets? Have the beautiful and musical names of Marvell, Suckling, Marlowe, Sylvester, Drayton been assigned to many squares or terraces? Is there out of London a Verulam Street or Row, or is there any reference to the great Lord Chancellor, or to Dryden, Swift, Goldsmith, or any honour of our literature? In France the names of celebrities are constantly assigned to streets in the towns which gave them birth. Nor does homage rest here. Béranger was born in Paris, but he assigns his name to the most conspicuous boulevard in Tours. Nantes names an important street after Crébillon, and one after Piron, both of whom were born in Dijon; another after Jean-Jacques Rousseau, a Swiss; a fourth after Boileau, who is believed to have been, like Béranger, a Parisian. La Rochelle names a street after Réaumur, the naturalist, whose memory is preserved in the thermometer of 80 degrees. Réaumur was, however, a native of La Rochelle. That Orleans should celebrate Joan of Arc, and Avignon Petrarch, was to be expected. Marseilles preserves in a street the name of Pierre Puget, the sculptor; while Nîmes, with a certain sense of fitness and of its own historical importance, names its older streets after Roman emperors in whose possession it once was, those bordering on the ramparts after military commanders, and those in the vicinity of the theatres after the more celebrated dramatists of France. I do not urge a similar course in London. Still, the neighbourhood of Drury Lane and Covent Garden might adopt some name such as Congreve or Sheridan, in place of the Wellington Streets, Henrietta Streets, and Catherine Streets, which show our complete poverty of invention.

I SHOULD like to join in a protest that has already been made by one or two well-known writers and bibliophiles, against a practice that has recently sprung into existence. Since new pleasures cannot be obtained, new hobbies seem to replace them. One of the latest of new hobbies is collecting book-plates. Now, against this in itself there is little to be said. When, however, to obtain his plate, the collector strips it from the cover of a volume, he is as complete a Vandal as those so-called collectors who, half a century ago, robbed the most priceless works in English literature of their title-pages and plates for the purpose of illustrating Granger's "Biographical History," or some similar work. To take the book-plates out of books is an absolute destruction of property. Gladly do I announce my intention to join the league already formed of those who will not purchase a book that has been treated in such fashion.

AS a supplement to the information contained in Mr. Proctor's essay upon "The Fifteen Puzzle" in the *Gentleman's Magazine* for January last, I may mention that the combination of the same number known as the 34 puzzle, worked with the same figures, is at least as old as the present century. In the *Amusements philologiques, ou Variétés en tous genres*, of G. (abriel) P. (eignot), Philomneste, R. A. V. Paris, 1808—a curious and, in its way, unique collection of whimsicalities—there is given what the author calls a "magic square, the numbers of which from 1 to 16 are arranged so that they furnish the number thirty-four when added up horizontally, perpendicularly, or diagonally." The arrangement is as follows :—

16	2	3	13
5	11	10	8
9	7	6	12
4	14	15	1

It will be seen, in addition to the different methods of reckoning mentioned by Peignot, that the four numbers in the corners amount likewise to 34, and that most combinations lead to the same result. I know that it has been shown, by means of a clever skit, that the 15 puzzle dates back to the time of Albert Dürer. There is nothing improbable in the supposition that it is even older. General faith in the cabalistic power of numbers prevailed through the dark ages.

SYLVANUS URBAN.

THE GENTLEMAN'S MAGAZINE.

JUNE 1881.

THE COMET OF A SEASON.

BY JUSTIN MCCARTHY, M.P.

CHAPTER XVI.

“ALL FANCY-SICK SHE IS.”

MONTANA got into Lady Vanessa's carriage. He was to have luncheon with her and her husband that day. Lady Vanessa chaffed him saucily and even rudely about the old man who had claimed him as a son. She had little idea of the mischief she was doing. Any chance that there might have been of Montana's returning to a sense of honour and duty was lost on that drive to Lady Vanessa's house. Montana began to hate the sprightly lady in his heart, but to hate her with a strange blending of admiration, and even with a throb of passion that was not hate. There was something so new to him in the sensation of being thus chaffed and laughed at by a handsome woman, that it gave a strange turn to his thoughts, and opened a new spring of excitement in his chill and lonely career ; chill in the midst of all outer excitement and inner emotion, lonely amongst incessant crowds. He felt curious longings to be revenged on the sprightly lady, and knew for the first time the bitter-sweet sensation that comes to a man when he is angry with a woman and yet is forced to admire her.

He went home that night in doubting mood, unusual to him. He began to feel that his way was slipping from beneath him, or at least that he himself was slipping away from the path he had marked out. He found that there were emotions which could disturb him still, and which had nothing to do with his own career and public

work. He had believed himself absolutely unimpassioned, master of all his emotions, capable of controlling not only every look, but every thought, and already he found himself distracted from the straight path by the strange and, as it seemed, almost fatal admiration he felt for Geraldine Rowan. And now for his further confusion came the cross-light of a new sensation far inferior in intensity and very different in colour, but strong enough to perplex and dazzle for the moment—a flame of petulant emotion towards a pretty, saucy, young, aristocratic woman ; a fear of her, and a longing to obtain some sort of mastery over her.

Montana began to think it would be well for him to set about his great scheme, to put it in motion, and make a grand triumphal departure from London with the close of the season, carrying Geraldine Rowan with him as his wife and as the companion of his expedition, his associate in the foundation of the sublime colony beyond the seas, out of which a new world and a new life for the old world were gradually to arise.

Did Montana really believe in this scheme? That, we suppose, no one can ever know. It is not likely—at least, from what was afterwards discovered, it does not seem likely—that he had ever thought the matter deliberately over, or had done more than allow the idea to grow upon him from day to day. He believed very thoroughly in himself, and believed that anything he started must come to a success. He had worked himself into a Napoleonic faith in his star, and in heaven's special protection of him. This faith may have been born of sheer vanity, or of prolonged mental strain almost approaching to a condition of intellectual derangement, but at all events it supplied him with any quality of earnestness which he could be said to have possessed. Whatever the strength of his faith, either in his project or himself, it does not appear that at this time he was making any preparation to carry his great scheme into effect. He listened to people's suggestions concerning it, and answered all manner of inquiries and letters. He gave everyone to understand that the scheme was growing into active movement day by day, and that he had all its details under his own eyes and in his own hands ; but nobody was ever admitted to genuine confidence with him, nor did he tell anybody what his preparations were. He was merely at present enjoying his success in his own fashion. He had found a career, and this was its zenith and its consummation. His strongest ambition all his life through had been to play to one great audience, that of London ; to fashionable, aristocratic, wealthy London in the stalls and boxes, and artisan, hard-handed, poor-

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He went home that night in doubting mood, unusual to him. He began to feel that his way was slipping from beneath him, or at least that he himself was slipping away from the path he had marked out. He found that there were emotions which could disturb him still, and which had nothing to do with his own career and public

itself was not ominous of good for Montana. It indicated a new turn in public opinion. Up to that time, people who disputed about him had only disputed as to the man himself, his earnestness, his sincerity, his eloquence. Now they began to ask, "What is he, after all? Where does he come from? Is his own account of himself the true one?"

Lady Vanessa told the story wherever she went, embellishing it with heedless humour here and there. From her lips it became a story of grotesque and Hudibrastic drollery. It told of a whole service suddenly disturbed, an entire congregation startled, first stricken with amazement, and then convulsed with laughter; of an orator and a prophet interrupted in the full flood of his discourse by a maniac, who insisted on rushing into the pulpit with him, clinging round his neck, sobbing on his bosom, and claiming him as his long-lost son. Lady Vanessa admired Montana in her own peculiar way, which had nothing whatever of coquetry about it; but she delighted in making fun of him and trying to make him look ridiculous. It was a real pleasure to her, the sense of power which she felt when she could succeed in making so conspicuous a man—such an idol of society and of the people—seem an object of laughter. It gave her the same sort of delight that some people get from annoying a favourite dog, or from putting ridiculous ornaments on a pet cat.

If things went on like this, people would soon begin to insist on questioning themselves and their friends as to the exact meaning of some of Montana's sayings, and the precise practical nature of that scheme for a new world which he was understood to have in hand. Vaguely, strangely, a sense of the growing danger appeared to creep in upon Montana's mind. He began to feel it as one even in a well warmed and curtained room grows to be conscious of the presence of the east wind. He became impressed with the necessity for doing something—what, he did not yet exactly know. Montana was a man who, when brought face to face with a difficulty and compelled to act, would always act with wonderful quickness, energy, and courage. As indolent men of a certain class are surprisingly energetic when they have to shake off their indolence and do something, so Montana, a born dreamer of the unimaginative order—a man who could dream about himself for hours and days, and contemplate himself, his career, and his soul, as an Indian fakir contemplates his body—had, when brought face to face with the necessity for action, the instinct of a commander and the eye of a pilot. He was conscious of this himself, and therefore never troubled himself about

decisions and plans till necessity brought the moment of making the decision and announcing the plan.

The incident in the Church of Free Souls had much disturbed some of the inmates of Captain Marion's household. Geraldine kept silent about it. She would not give any opinion. Melissa raged and blazed against the silly old man who had presumed to interfere with Mr. Montana, and she somehow seemed to take Clement Hope into her wrath, and to regard the whole thing as a device in which that luckless young man had been directly and malignantly engaged. Katherine was on the same side, but she was more timid about expressing her opinions. She seemed scared—an unusual thing for her—and cast furtive, almost fearful, glances every now and then at her husband, as if she were actually beginning to be afraid of him. Mr. Trescoe, indeed, came out also in a new light. He spoke with an energy that no one ever before had supposed him to have. He boldly and bluntly denounced Montana as a "genuine humbug," declared that he had not the slightest doubt the old fellow was his father, and a deuced deal too good a father for such a charlatan, and prophesied that before three months were over Montana would be known to everybody as a quack and a sham. These fearful opinions were combated with such anger and contempt by Melissa, that Captain Marion had to beg of Trescoe to discontinue his attacks in order to save Melissa's temper, and spare the nerves of the company. Captain Marion himself was clear and satisfied in his mind. Montana said the old man was not his father, and there was an end of the matter. The old man had been such a long time hoping and praying for his son's return, that he was ready to accept any good-looking stranger as the long-lost heir. The wonder was, Captain Marion said, that he had not found somebody to take the place of his vanished son long ago. Whatever Montana said must be true. Captain Marion was not even annoyed or offended by those who did not agree with him on this point. It was settled and certain.

Mr. Aquitaine came suddenly up from the north, and heard the description of the whole incident. The description, it must be owned, was given with very different colouring, and even very different array of facts, by the various people round Captain Marion's table. Aquitaine looked grave. He did not put away the whole affair as a trivial and unmeaning incident. In the north he had been making special inquiries about the young man who had once been employed in his house, and who was undoubtedly Mr. Varlowe's son. There were some clerks in the offices who still remembered young Varlowe clearly enough. They all bore testimony to one set

of facts : that he was very tall, dark, singularly handsome, with strange abstracted manners, and apparently an inordinate self-conceit and belief in himself. These statements set Aquitaine thinking. Now, when he heard that Mr. Varlowe had actually claimed Montana for his son, it did not impress his mind as absolutely certain that the old livery-stable keeper was labouring under an hallucination. This seemed to him to suggest some terribly momentous possibilities. If Montana was a deceiver in this, in what else might he not be a deceiver? It was now certain that, besides the hundreds and thousands in all classes who had faith in him, and would trust anything to him, some of Aquitaine's own nearest and dearest personal friends were ready to put their property, their lives, their happiness, almost their very souls, at his disposal. Up to this time, Aquitaine had not the faintest notion how things were going with his own hapless little daughter. It was only when they discussed the question in Captain Marion's house at luncheon, and when he saw the girl's flashing eyes and quivering lips as she maintained Montana's perfect nobleness and integrity, it was only then that a suspicion shot into his mind, and made him ask himself bitterly why he had felt so much surprised that Marion took so little heed of his daughter Katherine and her too open devotion to Montana.

Aquitaine was prompt in action. He went at once to Melissa. He found the girl in her room, and opened his subject with a certain sternness very unusual for him in his dealings with her.

"Look here, Melissa," he said. "I want you to be more careful than you are in the way you talk about Mr. Montana."

Melissa started, and turned her eyes upon the carpet. Her lips trembled.

"I don't like to hear any girl," he said, "talking with such open admiration and rapture about a man, and making herself his champion and his devotee. Besides, there is something I have heard about Montana—well, no, I won't say that; not that I have heard anything against him, but something has come to my mind that makes a sort of doubt—and it may be right, or it may be wrong—but anyhow it is not well, in the mean time, that you should get your name mixed up with his."

"Oh, papa," said Melissa, "what are you saying?"

"Well, my dear, I am saying exactly what I think. Anybody who heard you raving about him to-day, before all those people, would think you were some silly girl who had fallen in love with the man, and had not the sense to conceal it."

Melissa looked up at first, red and angry, and Aquitaine expected

one of her familiar outbursts of temper. But to his surprise her pretty little face became contorted, and she burst into tears.

"Why, what is the matter with the child?" her father said. "I have not been saying anything very dreadful, Melissa. I am only giving you advice."

She covered her eyes with her handkerchief, and only sobbed out :

"I never saw you angry like that with me before. I'm not used to it."

"Well, well, my dear, I don't mean to be angry with you, but I want to impress you with some sense of the necessity of being a little careful. I quite understand a girl's admiring a man like Montana, and of course he is twenty years at least older than you are, and I dare say you don't think any harm about going into any raptures about a man of that age. But don't do it, my dear; be a little cautious. I can't tell you exactly what I am thinking of, and there is not very much to tell; but I am not quite certain about Montana, and I have given Marion a caution, though it won't do him any good, and his daughter Katherine makes exhibitions of herself almost as bad as"—he was going to say "your own," but he stopped out of tenderness for poor Melissa's feelings. He was a resolute man, however, when he clearly saw his way to anything, and he now saw his way very clearly to the necessity for checking Melissa's public displays of her admiration for Montana.

"Fact is, Mel," he said, "if you don't be a little more careful, I should think the best thing would be for you to come back with me to the north as soon as possible."

She started at the words. Aquitaine saw with pain that the suggestion was a terror to her. She did not want to go home. It had come to that. Well, he must make allowances. London in the season is London in the season, to be sure, and girls will like parties and balls, and the opera, and visits, and all the rest of it as long as grass grows and water runs, and the best of parents must be content to put up with the knowledge that his daughter can get on very well without him, and be very happy away from home, when her home is not in London. So he only winced, and pulled himself together, and was good-humoured as before.

"If you like to stay till the end of the season, Mel," he said, "you shall do so, my dear, but only on this condition, remember. Just bear my warning in mind. Don't make a display of your admiration for our friend. It is a very natural admiration, I am sure, and in one way I am glad to find that you can admire anybody so much

as that ; and I did not think it, somehow, once ; and I ought to be glad of it, and I am glad of it in a way ; only, don't show it, my dear, don't show it so much,"

CHAPTER XVII.

GERALDINE'S EXPEDITION.

Now, there was nothing in all this conversation, one would think, that ought to have brought positive terror to the girl's breast. Nobody could know better than Melissa how little likely Mr. Aquitaine was to treat her with harshness ; and, after all, even the most maidenly and modest of girls need not feel utterly humbled because her father has given her a caution not to talk too rapturously of a distinguished public man. One can easily imagine a very well regulated and orderly little girl losing herself in wild avowals of admiration for Mr. Gladstone, or Mr. Browning, or Dean Stanley, or Sir Frederick Leighton, and being bidden by her father to rave an octave or so lower in general company, and not feeling utterly crushed by the rebuke. But the moment Mr. Aquitaine had gone, Melissa threw herself down on the floor all of a heap, and bemoaned herself there for a while, cowering like one in physical terror. Then taken with a sudden thought, she jumped up, shook out her betossed skirts, dashed her hair into something like order, ran to Geraldine Rowan's room, and knocked at the door.

"Let me in ! Quick ! quick ! Let me in !"

Geraldine opened the door, and let the alarmed girl in.

"Oh, Geraldine !" she exclaimed ; "I have done a dreadful thing. You must help me ; you must do something—I don't know what ; but you must get me out of this scrape. I am in such a fix ! Oh, why did I ever do it !"

"What have you done, dear?" Geraldine asked, really alarmed at the girl's manner.

"Such a dreadful thing ! Oh ! how can I tell you ? But I had better tell you than anybody else. You must get me out of it. You must ! you must !"

"But what have you done, my child?"

"I have written to Mr. Montana. I have written a mad love-letter ; I have put my name to it ; and I have told him I'll go anywhere over the world with him, if he'll let me ; follow him as a page, if he likes—I think people did such things in books,

didn't they?—or I'll—I'll—I'll marry him, if he likes—if he will have me!”

“You have not written this dreadful stuff to Mr. Montana?”

“Oh, haven't I, though! Yes, but I have; and I have signed it with my name. Oh! I've been and done it this time, Geraldine; and won't there be a row in the building when my father comes to know!”

“What on earth possessed you to do such a piece of madness? Why did not Mr. Aquitaine take you home long ago, or stay here to look after you? Why did not you tell me what you were going to do?”

“Well, it's partly your fault,” said Melissa, flashing up; “and so you are bound to get me out of this fix.”

“Partly my fault?”

“Yes, I say it is your fault; and it's *all* your fault. You are to blame for the whole of it. Why did you go on so—condemning Mr. Montana and running him down? You might have known it would have set me off wild in the other direction.”

“But I did not condemn him,” said Geraldine; “I did not run him down.”

“You sat and listened, and looked on approvingly, while Mr. Trescoe—that fool, that dull, silly, weak creature!—yes, you listened while he ran Mr. Montana down; and you agreed with him, and you agreed with his doubts, and you agreed with everything that was said against him; and what was I to do? Of course I wasn't going to stand that. I resolved to show him that I, at least, did not doubt him; and there—that's why I did it; and you are to blame, and you must get me out of it now.”

“What can we do?” Geraldine said, almost in despair.

“I don't know,” said Melissa, sitting down now rather composedly, and nursing one knee between her two little hands; “but you have got me into it, Geraldine, and you must get me out of it, and that's all about it.”

Geraldine thought the matter out as well as she could, her face puckered up with anxiety, and resting her chin upon her hand. A general on the eve of a difficult campaign, or a judge perplexed by some most exasperating point of law, could hardly have had a brain more perturbed by the difficulties and responsibilities of the hour. “When did you write this letter?” she said at last.

“Oh, I don't know; about an hour ago, or it may be an hour and a half, perhaps, or two hours; before luncheon—before papa came and talked to me. He has been talking to me. Did I, or

didn't I, tell you? Yes, he has been advising me and talking to me ; and I know, if he found out this, things would be bad. It must have been an hour and a half ago, I think."

"How did you get it sent to the post?"

"Well, I had it in my pocket when Sydney and I walked out to-day, and I just stayed a moment behind her at the corner of the street, and dropped it into the letter-box there."

"Good gracious!" said Geraldine ; "what deceits and dodges one gets into!"

"Never mind what one gets into," said Melissa ; "get me out of this now ; that is more to the point."

A wave of inspiration tossed up a purpose in Geraldine's mind.

"He may not have got it yet," she said. "We'll get it back from him, Melissa. I will go myself and get it back."

"Oh, will you?" said Melissa, her eyes brightening up with hope and wonder. "Will you have courage? Will you do it? Have you the nerve? I know you American girls will do anything ; but can you do this?"

"I have nerve enough when I want to help a friend out of trouble," said Geraldine ; "and I am not an American girl, Melissa, but I have learnt in America not to be ashamed or afraid of doing anything that is right. Girls in America are brave and free, and they are only taught to be afraid or ashamed of doing what is wrong."

Then she stopped and began to feel rather ashamed of preaching at the poor little offender before her, but Melissa had hurt her by speaking of American girls as if they were girls who would do anything without regard for the proprieties. "Yes, I will go," Geraldine said again ; "we may be beforehand with the postman. Mr. Montana may not have got it."

"If I could get it back again," Melissa murmured piteously—"if I could only be certain that he had not read it, I am sure, Geraldine, I'd never do such a thing again ; at least, I think I wouldn't ; oh, indeed, I do ; I think I would not do it again."

"I am sure you would not do it again," said Geraldine. "I would not do what I am going to do for you if I thought there was the least chance of your attempting such a thing any more."

"Well, don't preach, there's a good girl," said Melissa ; "I never could stand being preached at."

Even in all her gratitude to Geraldine she could not subdue her mutinous inclination, and would not be preached at.

"I am afraid preaching does not do you good," Geraldine said softly ; "perhaps you are not much worse than many of your neigh-

bours in that way. Anyhow, Melissa, I will run the risk. I will go to Mr. Montana. I will not trust to sending anybody. Nobody must know about this but you and I and he, and if I can, he shan't know your name."

Yes, Geraldine thought to herself, I will go. What does it matter? It is not anything wrong. What if people do think I am American in my ways, and that I venture to do things that English girls would not do? I don't care. This is not venturing very far, after all, to pull a friend out of a trouble; and if anyone finds out that I have done so, and is angry with me, or thinks badly of me, well—I can bear it—I'd do more than that to help poor Melissa.

One hour and a half in the day Montana kept for himself and his few especial friends. That was the time from half-past five to seven. The general public were shut out at that time, and Montana was shut in. Those who were able to see him then were the favoured intimates to whom he had given the *consigne*, and who would come and talk to him in a friendly way about anything or nothing, and smoke a cigar with him. It was a great privilege to be amongst those who were admitted to Montana's hour of privacy. Montana took care to give admittance in such a manner as to make it evident that he was not distributing his favours only amongst the powerful and the great. Some of his poorest and humblest followers had the pass-word. Women as well as men were privileged. It was not long before Lady Vanessa established for herself and her husband the right of entry, and she sometimes came even without her husband, and talked with Montana and whoever happened to be there, and occasionally smoked a cigarette in her affable and familiar way. Young men who could get admittance at this special hour were proud of it, and talked of it a good deal amongst their friends.

Now, as chance would have it, this was the very time of the day when Geraldine had to make her visit to Montana. She thought she could get to his place easily, speak to him, and get back again before it was time to dress for dinner. There was not a moment to be lost. She hurried downstairs, and went her way with heart high beating, it must be owned, but very resolute and quiet, determined to put the thing through, and not to let poor Melissa get into trouble because of any fearfulness or hesitation on her part.

Montana had just entered his little reception-room to wait for any of his friends who might come, when he was told that a lady wanted to see him. He replied that he was engaged, and at that hour could see no one. The servant came back with a still more pressing request from the lady to spare her a few moments.

Montana asked, would the lady favour him with her name ?

Reply : " No, the lady would rather not, but she could say that he knew her very well."

Montana looked at his watch, and saw that it yet wanted a minute or two of half-past five. Perhaps nobody would come very punctually. He might get rid of this unusual visitor in good time. " Let the lady be shown up." To his surprise, when she came into the room, he saw that it was Geraldine Rowan. But if he felt surprise, as he certainly did, he took care not to show it. He advanced to Miss Rowan with so easy and friendly a manner that she might have thought he was expecting her, and a looker-on might have supposed that her visit to him was the most ordinary and natural thing in the world.

Geraldine felt greatly reassured by this, and there was something so gracious and kindly in his smile that she began to understand dimly what was the meaning of the sort of fascination he seemed to exercise over so many men and women. They shook hands ; Montana placed a chair for her, and said he was glad to see her, in a tone admirably suited to encourage confidential communication, although neither in tone nor in look did he show the slightest appearance of one who expects a confidence, or who regards the whole meeting as other than a common-place friendly visit.

" Mr. Montana," she said—and then she stopped for want of breath, and for a moment it seemed as if she really could get no words to go on with. Then she braced herself, and tried to find deliberate utterance. " Mr. Montana," she went on, " you will think it very strange that I have come in this way to see you, and I think it strange myself."

Montana only said, " I am not likely to think anything strange that Miss Rowan does ; and besides, strange things are often the right things, and I am sure whatever you do is done with a right purpose."

" Thank you," she said, and she really felt grateful to him for the manner in which he had relieved her of some of her embarrassment. " I shan't keep you long."

" That," said Montana, " is an ungracious beginning."

" I shan't keep you long," she repeated. " I have come to ask you a favour, Mr. Montana. Perhaps it is an act of justice. It ought to be. But I don't know, and I am quite willing to put it as a favour."

" I only hope it is something very hard to do, so that I may do it, and show that I am not unworthy of being asked."

"It is not hard to do. It ought not to be hard to any man, and I should think it ought to be least of all hard to you. I put it as a favour. I don't come to you willingly, Mr. Montana ; I don't admire you, and you know it. I don't believe in you, whatever other people may do."

"You will believe in me one day," said Montana composedly, "and you will help me, and join with me. That is as certain as the rising of the sun to-morrow."

She looked at him with something like contempt. "I don't believe in you now, at all events," she said, "and I am more than ever convinced that I am right by things that have lately happened. I don't believe you are what you say you are ; at least, I believe you are what you say you are not."

Geraldine looked straight into his eyes to see if any sign of embarrassment or surprise might be found there as she spoke these audacious words. But the eyes returned her look with that calm, grave, sweet expression which was always in them. "If Montana is an impostor," she thought, "he is well made up for his part." The truth was, that Montana had prepared himself again and again for every possible utterance of this kind from every conceivable person, and was as little likely to be put out now as a trained actor on the stage is put out by the speech of the theatric opponent which gives him his cue.

"Tell me," he said gently, "what is the favour you want of me ? if it is in my power, you shall have it all the same, whether you believe in me or not. How you act towards me could not be any guide for my acting towards you. The less you think well of me, the greater is my anxiety to show that I don't deserve to be thought badly of."

"Well," she said, "I want to get from you a letter which you must have got to-day. I want to get it from you unread, if you will give it to me ; but read or not, I want it back again."

Montana now looked a little surprised. "Certainly," he said, "you shall have any letter that I have received which concerns you in the least. But I have read scores of letters this morning already, and I don't remember one of them in which you could have the slightest interest. However, I give you my promise that you shall have any of them, or all of them, if you are in the least inclined."

"Perhaps you have not read this one yet ?" she said. "You have letters still remaining, perhaps, unopened ?"

"A good many," he said with a melancholy smile. "The opening and reading of letters is one of the weariest occupations of my life. I sometimes feel inclined to wish there were no post-office."

See, there is a heap of letters already lying on this table by the last post, which my secretary has not touched as yet, nor I. Will you look amongst them? Do you know the handwriting of the letter you speak of?"

"I do, very well."

"Is the writer a man or a woman?"

"It is a girl," Geraldine said, with some hesitation.

One little gleam of curiosity and surprise did actually come into Montana's eyes. "Will you tell me," he said, "why you want the letter back?"

"Oh, no," she said, "and that is another favour; pray don't ask me. I beg of you not to ask that. Think I am unreasonable; think I am ridiculous; think I am out of my senses, if you like, but grant me this favour. Do let me have the letter, and don't ask me anything about it."

"By all means," Montana answered. "Look amongst these letters, and take away any one you like."

Geraldine tried to be cool and composed. She turned the pile of letters over and over, and sought out the one she fain would have. It was not there. No address was written in any handwriting in the least like that of Melissa Aquitaine.

"It has not come yet," she said, "but it will come. I don't know what to do."

"What is this terrible letter?" Montana asked. "You see, if you give me any description by which I may know it, I can look for it, and will take care that it is sent to you. Or would you rather come here after the next post or two and try again?"

"Oh, no," she said. "I can't come again."

"Can't you give me any idea of what sort of letter it is, or what it is about? Surely you may trust me so far as that?"

"I must," said Geraldine, rather dolefully. "I must trust you. I can't come again to-day, and the letter will certainly reach you some time to-day. It is a letter in the handwriting of a girl who has written you ever so many letters before—letters of admiration, and homage, and that sort of thing. You may perhaps know the handwriting; I beg you, if you do, to send me back that letter unopened."

"I don't remember any one handwriting in particular; I receive a great many letters from women, and let me say, Miss Rowan, not a few of them are foolish letters. Do I know the writer of this letter?"

"Pray don't ask me anything," said Geraldine. "The writer of

the letter now wishes she had not written this last one, and I want to get it back."

Montana stopped for a moment, and a sudden expression came over his face which made him look as if he had grown ten years younger. "Can it be possible," he said, "that you have yourself written these letters, Geraldine, and that you now repent, and want this one back? If this is so, pray, pray let me recall my promise."

"I have not written the letters," said Geraldine, with a scornful ring in her voice; "I never wrote such letters, and I should never be likely to write any such—to you, of all men in the world. The foolish child who did write them has at last been wild enough to tell you her name, and I want you not to know her name, and if you will give me back the letter—well—I shall thank you, and say that you are perhaps better than I thought." She got out the words slowly, one by one, with difficulty and hesitation. "But if you won't give it back to me, then I can't help it—keep it—I have no more to say."

"You are angry with me," Montana said gently, "and I don't wonder. I was wrong to think that you could have written such letters. I know you would not; much as I want you to think well of me, I don't want you to express a kindly feeling in such a way as that. You shall have the letter, of course. I don't want to read the poor girl's nonsense. I don't want to know her name, or who she is. I should give her good advice, if I knew her, and try to reason her out of her folly. What do I care about the admiration and the rapture of women? I would rather have one kindly word from you than the homage of all the other women in the world."

CHAPTER XVIII.

ILL MET BY MOONLIGHT.

WHAT Geraldine might have said in answer to this declaration she did not herself know, for at that moment the conversation was interrupted by the entrance of Lady Vanessa Barnes and her husband. The tall handsome lady seemed to fill the pretty little reception-room as she came in with her strong, graceful movement, every motion as she walked seeming to tell of careless, unconscious strength, and her face lighted with animation, high spirits, and curiosity.

Mr. Barnes, her husband, was a young-looking, slender, somewhat timid man, who always seemed as if he were trying to escape

from notice behind his wife's petticoats. He was a man of intelligence and ability in his own way, a keen financier, a reader, and almost a scholar; but his business in life now was to be overshadowed by his wife, and it was his pleasure too. To rest in her shade made him happy. She was very fond of him, and he knew it, and liked her to have her own way in everything.

Lady Vanessa fixed her eyes inquiringly on Geraldine, and after the interchange of a few words with Montana, she turned to the girl and said,

"I always remember any face I see, and I have seen this young lady somewhere—at the Church of Free Souls, or whatever you call it. Am I right, Mr. Montana?"

Montana presented Geraldine. He was glad Lady Vanessa had come. Her coming prevented Geraldine from replying to his declaration. It compelled her to receive it without a protest. That was something.

"Yes, I thought as much," said Lady Vanessa. "You are the young American girl, ain't you?—some one told me you were."

"No," said Geraldine, "I am not an American. I have lived in America, but I am an Irish girl." She usually had to explain about three times a day that, although she had lived for many years in America, she was nevertheless not an American.

"Oh, an Irish girl?" Lady Vanessa said. "I see—yes, exactly; that is why you are so good-looking. They say all Irish girls are good-looking, don't they?"

"I don't know," said Geraldine.

"But you know that you are good-looking," said the pertinacious lady.

"I don't," said Geraldine.

"Come, now, is that true?"

"Quite true," replied Geraldine boldly. "There are different ideas about good looks; I don't admire myself."

"Oh, you don't? Mr. Montana does, I dare say."

"Every one does," said Montana. "All who know Miss Rowan admire her."

"Well, I am sure I admire you already," Lady Vanessa said. "But, where did you get that pensive look in your eyes? You look as if you were dreaming."

"I am short-sighted, and I suppose that gives one a dreamy look."

"Then, I wish I were short-sighted," said Lady Vanessa. "That is exactly the sort of look I should like to have. Don't you think so,

Albert? Do look at Miss Rowan's eyes, dear. Isn't there a wonderful expression in them?"

Mr. Barnes looked, not very boldly, into Miss Rowan's eyes, and said, Yes, there was. Quite so. Exactly.

Geraldine felt embarrassed—an unusual thing for her. She was not embarrassed in the least by Lady Vanessa's questions or compliments, but by the whole situation, by Montana's recent words, by the knowledge that the moments were passing rapidly away—so rapidly, that she must get back soon—and that she had not got the letter.

She must go. Other visitors would come, and it was impossible that Montana could now satisfy her request. She rose to go. She cast an appealing look at him. Despite his recent declaration, she had to appeal to him still, for Melissa's sake. She hoped he would understand her look, and come with her out of the room, and let her exchange another word with him. He did understand her, for he rose to accompany her to the stairs. But as she was going, Lady Vanessa stopped her with a friendly hand.

"Look here, my dear young woman," she said, drawing Geraldine aside; "I must give you a piece of advice; you are from America, and girls do as they like there. You don't understand our ways. You must not come all alone here paying visits to handsome men like Mr. Montana. That will never do. People will talk about you. Don't be offended. I give you the advice for your good."

"I am much obliged to you," said Geraldine coldly. "I think I can take care of myself."

"Awfully proud," said Lady Vanessa. "I see; all right, dear; I mean no offence."

"Indeed, I have not taken offence," said Geraldine, recovering herself, and pleased with the frank ways of the eccentric lady.

"You see, I am older than you," said Vanessa.

"I don't think you are, really," Geraldine answered, "if it comes to that."

"Well, I'm older in experience; I'm married; I am well up in all the ways of our world here, and I know what people would say. I never care what they say of me, to be sure; but that's a different thing."

"Why is it so different?" Geraldine was too ingenuous even to suspect that Lady Vanessa meant to say, "Because I am a great lady and you are not."

"Oh, well," and Vanessa laughed; "because, don't you see? I have caught my fish, child, and you haven't—at least, you haven't

hooked him yet. 'That's how it is.' She gave her husband's arm a good-humoured squeeze. "This is my fish, don't you see? I've hooked him."

Then Lady Vanessa and Geraldine both became aware that a new visitor was entering the room—a visitor of a very different class from any to which the Duchess of Magdiel's daughter was accustomed.

We have already spoken of the wrecks coming to the shore, Montana being the shore to which they drifted. Amongst the wrecks which thus came floating towards him was that of a family in the east end, the family of a fanatical poor working man, a member of a small odd sect of Peculiar People, or such-like, who in an early chapter of this book has been described as attending Montana's first lecture in London, and going up to him and making his acquaintance—what time the Duke of Magdiel was coldly repulsed. Poor Matthew Starr was a fanatic of benevolence, a furious devotee of equality and of purity, a virtue's Quixote in the east end of London, and in a ragged moleskin jacket. A waif and wreck of the ancient Chartist days, he had spent his life working hard, rising early, resting late, suffering want, weariness, disappointment after disappointment, seeing the light of every hope go out one after the other, and still living and feeding on his faith in an impossible future of happiness and equality and goodness for the living world. He might in other days have been a martyr—perhaps a Stylites. Fate had sentenced him to drudge in Whitechapel, to marry a stupid little girl who in the end took to drink and died of drink, to have a crowd of children depending on him, and whom he had to trust to the nursing of chance, or strangers, or each other, or anybody, during his long daily work. They grew up, and most of them turned out as he would not have them. Two of the boys went into the army, and he hated soldiering with a passionate intensity of hatred. War was to him only murder on a large scale. A soldier he regarded simply as Cain in a red coat. Another son became a servant, a footman; and if there was anything which Matthew Starr hated almost as much as a soldier, it was a lacquey. Two of his daughters had become domestic servants. For one of them he had succeeded in getting a place in a milliner's shop, and she presently went terribly astray and wandered the streets at nights, and poor Matthew Starr was as much of a fanatic for purity in women as he was for peace and goodwill in men. Still, he remained hoping on, believing in the good time coming, passionately longing for some new world and new life under other influences and other skies. When Montana came to

London and divulged his scheme, it seemed to Starr as if heaven were opening to him—at least, as if heaven had sent to him this man with a special commission to lead him out of the darkness and despair of his London life into light and happiness.

Montana smiled on him with that sweetness which passed with so many of his admirers for an almost divine beneficence. But, to do him justice, he did not merely smile ; he was really kind to poor Starr. The one thing that the old man would most wish to have done for him, Montana did. He found out the lost daughter, and talked to her gravely and sweetly, brought her back to her father's house, and undertook to find for her some fitting occupation until they could go out to the happy new world where all was to be well. Not without trouble did Montana get Starr to receive his daughter back again. All his authority was needed to enforce it, though when it was done the man seemed to soften to the girl, even more than might have been expected, and to cling to her with new passion of love and hope. As for her, she soon wearied of the narrow miserable home where she hated to live. She hated a life of monotony. She was only kept from tearing herself away and going back to her old ways by her belief in the happiness that was in store for them when they should become members of Montana's new colony. Montana had often pictured for them the life that was to be in that new place, where all were to be equals, and all were to have work enough, and only enough, and ample leisure, and means to live, and amusement, and no care ; no mists and fogs and cold skies over them, no mud under their feet, no dark dull houses around them, no tenements crowded with hard-working, hard-drinking lodgers and screaming children. The man and the girl lived on the hope of this new life, he because it was to be a life of equality, and purity, and progress, and she because it was to relieve her from the monotony of her present existence, and because it offered her some prospect of variety, and colour, and amusement, and perhaps—for she never followed very closely Montana's somewhat vague descriptions—some promise of money, fine clothes, and frequent visits to a theatre.

Mr. Starr was for modestly drawing back when he saw the ladies, but Montana called to him to come in, and he entered with a look half timid, half defiant, at once shy and fierce—awkward in the presence of the well-dressed women, angry with himself at the bare idea that they should think he was awkward, and determined to make it plain that he was not. He looked with a glance of especial defiance at the tall and imposing Lady Vanessa ; and as she returned his look with an expression of amused curiosity, he set her down at

once as an enemy. He turned a sharp glance upon Geraldine ; but as her eyes only looked softly into his with the dreamy expression of short sight, he assumed that she felt rather kindly towards humanity in general, and was inclined to like her.

"I am glad to see you, Starr," said Montana, shaking hands with the old man cordially, and favouring him with a specially sweet smile. "How is Fanny? does she get to like her work any better?"

"Fanny don't like her work," and Mr. Starr shook his head; "she don't get reconciled to it, somehow; she don't like the being up early and down late. She don't like the regular hours. She's not been used to it, poor thing, so long as I have. The unicorn, Mr. Montana, don't like to abide by the crib, does he?"

There was a certain half-educated dignity about Mr. Starr's style of speech and about his fanatical free-thinking. He read the Bible a good deal, and admired its language and its illustrations. He read Shakespeare and Milton, and Paine's "Rights of Man," and the "Vestiges of Creation," and the essays and speeches of Mr. W. J. Fox.

"No," said Montana, "she is young. We must make allowance for her, Starr, must we not?"

"We must, Mr. Montana, and we do. I am sure you do. We must get her away out of this. When we have her out in your grand new settlement under the bright skies, and where there is a life to live for, I think she will settle down then and be a fine woman yet; I do. But I long for it. When is it to be, Mr. Montana? Do tell me!"

"Soon," said Montana, "but not too soon. We cannot hurry the movement of events."

This was oracular, and it was all that Starr could get to satisfy him. He sighed. Then, suddenly looking up, he asked, "There ain't no delay, Mr. Montana? no putting off? nothing you did not expect?"

"All," said Montana, "is going on exactly as I expected and arranged."

"Thank God!" said Starr. "But I am disturbing these ladies," he added, for he saw that Lady Vanessa seemed about to go. "I am intruding, maybe? I will go."

"Pray don't go for me," said Lady Vanessa; "I am going myself."

"This is a friend of mine, Lady Vanessa," said Montana; "Mr. Starr, an honest, capable working man, a credit to his order, a man who has educated himself, and has had a hard struggle with life and fate,"

"I am glad to know you," said Lady Vanessa good-humouredly ; and her husband expressed equal pleasure in knowing Mr. Starr, but he thought to himself that surely Montana was an odd sort of person.

"I don't think you are glad to know me," said Starr, addressing Lady Vanessa, and ignoring Mr. Barnes altogether. "You are a fine lady—a great lady, I dare say. What should you be glad to know me for? You are the enemy of my class. You would be my enemy if I was worth it, but I am not."

"Starr, my dear friend !" Montana said, interposing.

"Look here, you know——" said Mr. Barnes.

"All right, Albert ; never mind," said Lady Vanessa. "I don't mind in the least. I like our friend to have his say out. Why shouldn't he? Well, Mr. Starr, why do you call me the enemy of your class? I don't want to be anybody's enemy, I am sure ; and I don't think I am—except my own, perhaps, sometimes."

"You and your class are our enemies," said Starr. "You keep us down, and grind us, and crush us, and keep us from our rights. You have the land and the money, and you live in fine houses, and you wear grand clothes," and he waved his hand towards Lady Vanessa as if he were specially pointing attention to her garments, and calling the world to witness that his words were true ; "and we starve, we work morning and night, and our girls suffer—they go wrong, maybe."

"I like arguing," said Lady Vanessa. "One does not often find anybody to argue so stoutly as our friend. But now, look here, my good man ; I couldn't help being born what I was any more than you. What good would it do to you if I didn't wear good clothes? You wouldn't take money, I suppose, if I offered it to you?"

"No," he said ; "no man ever dared to offer me charity, and I hope a woman wouldn't do it."

"Then, what could we do for you?" she asked bluntly.

"Anyhow, you have all the money and all the good things, and you keep them ; and we have no share, and we have as good a right to them as you ; and we work, and you do nothing. I don't mind the Queen—I don't find fault with the Queen."

"Well, that's considerate," said Lady Vanessa, with a laugh.

"No, I don't ; she has some work to do, anyhow. She has business set out for her ; she has duties, and she does them. I don't say that I think the country wants such duties ; but they are given to her, and she does them, and she has a right to her pay ; and I am told she is a good woman, and minds her children—or

did mind them when they were young. I find fault with you—you and your lot. You have no duties. If you had, you wouldn't do them. You have nothing to do but take your money and spend it."

"You ought to like this young lady," said Lady Vanessa. "She is a Republican ; she comes from America."

"Do you come from America, ma'am?" said the old Chartist, turning to Geraldine, his eyes suddenly lighting.

"I have lived a long time in America," she said. "I don't know whether I am Republican or not. I am Republican for America, certainly ; but I have not thought over the matter very much for any other place, Mr. Starr. Are you a Republican?"

"Oh, yes!" he said. "I live for Republican principles. I'd like to die for them. I live in the hope of being one day in a Republic—in Mr. Montana's new Republic, with him for president, and us all equal. I shouldn't care to live another hour if it were not for that and for Fanny—that's my daughter, miss."

"Is she ill?" asked Geraldine ; because she fancied, from his manner of answering Montana, that she must be.

"She is ill, ma'am ; not in the bodily sense so much—although she is delicate a good deal—but she is restless ; she is unhappy."

"May I go and see her?" Geraldine asked, in her usual impulsive way.

Mr. Starr looked uneasily at Montana. "Well, I'm sure I don't know, miss," he said. "Maybe it would not be right of me to bring you to see her."

"Oh, if it's anything like fever or that, I don't care a straw—I mean, I'm not afraid. I have done all sorts of nursing ; I never got any harm."

"No, miss ; no, it is not that ; she is not sick in that way. But I don't think Mr. Montana would like you to know her, perhaps."

"But," said Lady Vanessa, "this young lady is a Republican and a Democrat, don't you know. She hasn't any of my odious class prejudices ; she is not your daughter's enemy. I suppose it would be no use for me to ask to go to see her. But I would if you would let me."

Mr. Starr looked into the great lady's eyes, and really saw only a kind of blunt good-nature there.

"Well," he said, "I don't believe you're half as bad as you seem. I dare say you would do a good turn for anyone ; and it isn't your fault, as you say, that you were born a curse to the world—I mean

your class, ma'am, not yourself. I dare say you are a kind-hearted, honest sort of woman. But it was not about that I was thinking when I did not want this young lady to come to see us. You are not married, ma'am—miss, I mean?"

"No," said Geraldine. "What would that matter?"

"Are you married, my lady?" he got out the title with great difficulty, and as an absolute concession to Lady Vanessa's personal good-nature.

Yes, Vanessa assured him that she was married.

"Well, I don't know," he said; "you are both of you very kind; but I can't say. I'll ask Mr. Montana about it."

"And Mr. Montana will let me know," said Lady Vanessa; "and if there is anything at all I can do to show that I am not the enemy of your class, Mr. Starr, I'll do it."

Lady Vanessa and her husband went away. Some other people came in.

"I will go to see your daughter, Mr. Starr," said Geraldine, "if you will give me your address. I shan't wait to ask Mr. Montana. Republican girls from America, you know, don't ask anyone's authority to do anything."

It was not possible for Geraldine to wait any longer. She was palpitating with anxiety at having to wait so long; and she had still to speak again with Montana about Melissa's hapless letter. When she left the room, Montana went with her. In her anxiety about Melissa, she had almost forgotten the very direct avowal of admiration and something more which he had so lately made to her.

But Montana was calculating upon all her movements. He knew what an advantage he must have in the fact that she had, as it were, to condone his declaration of love, and to talk with him in the closest confidence after he had made it and she had heard it. Even if he had now in his hand the letter which she was so anxious to get, he would not give it to her just yet. It had still a purpose to serve.

When they got outside the door, she asked, "What *am* I to do, Mr. Montana? You cannot give me this letter ——"

"I have not got it," he said. "Can you wait? You might wait in one of the other rooms. Nobody will come there; and as the letters come, they shall be shown to you. You can wait in the room where the letters are always brought."

"I can't wait," she said. "It is impossible. I must go back."

"Shall I come and see you to-night, and bring the letters with me? I am going to dine out. I will call afterwards and ask for you."

She thought over this for a moment. "That would never do," she said. "I should not be able to see you without making people wonder and suspect something."

"Then, will you come and see me here late to-night? It does not matter. We understand each other. Nobody will know."

"Oh, I couldn't do that," said Geraldine. "That is beyond even me, Mr. Montana."

"Can I send you the letter?" he asked. Then he stopped suddenly and said, "Of course I can't do that; I don't know the handwriting. Besides, if it really is so serious a thing as you think, we had better not let anybody into it. Will you send your maid here at ten o'clock to-night? The last post will have come in, and the letter must be here then if it is to come at all."

"I haven't a maid," said Geraldine. "And even if I had, I should not like to let her into all this. I don't want to bring other eyes on me. I couldn't send Miss Marion's maid or—anybody's."

She was going to say "Miss Aquitaine's," but stopped so significantly that Montana, if he had been the dullest person in the world, could not have failed to know why she forbore to utter that name. He had not guessed before who his mysterious correspondent was. It was clear as light to him now.

"I can only think of one other plan, Miss Rowan. Don't be alarmed. It may look very dreadful, but it is not. I shall leave the place where I am dining, early, and get back here, and get whatever letters there are in anything at all like a woman's handwriting. I shall walk into Berkeley Square. Will you find some way to come there at ten o'clock, and you shall see the letters and take the one you want? Come, I can think of nothing else but this. It is not a bad plan, and, after all, mysterious meetings are best carried on in the public street. Don't be afraid. If you really are anxious about the letter, this is the only thing to do."

Geraldine turned it over in her mind as quickly as she could. She thought it did seem the best thing to do. To call again the next day, or to get him to send her letter after letter on the chance of its being the right one, or to wait any longer for any cause, seemed most unwise. In the depths of her heart, she did not trust Montana far enough to leave the letter too long in his possession. "I have to get it," she thought to herself. "I have set my heart upon it, and I will not stick at a trifle to succeed."

"Yes, Mr. Montana," she said at once, and quite composedly, "I will see you in Berkeley Square at ten to-night. Good-bye, until then."

She was not five minutes from Captain Marion's house, and we may be sure she lost no time on the way. She exchanged a hasty word with Melissa.

"It will be all right, Melissa. I haven't got it yet——"

"Oh, you haven't got it?" Melissa said discontentedly. "I thought as much!"

"But I shall get it, you sceptical little girl; you shall have it to-night."

It was only when she got to her own room, and was hastily dressing for dinner, that Geraldine began to reflect on the wild escapade she was engaging in, and on the fact that Montana had made to her something very like a declaration of love, and that she had not repelled it.

Mr. Longfellow, in his charming "*Hyperion*," compares something or some line of argument to certain roads in the wilder parts of America which begin broad and clear, and gradually get narrower and narrower, becoming a mere footpath through a forest, and at last dwindling away into a squirrel track and running up a tree. Curzon Street, Mayfair, is not a little like a road of that description. Opening broadly enough out of Seamore Place, it goes a stately way about as far as Queen Street, and then it gets smaller, dwindling down after it passes Clarges Street, and wandering through little shops and stables, until at last, when it has crossed Bolton Street, behold, it suddenly becomes Lansdowne Passage, a narrow paved walk between two high walls, which may perhaps for the purpose of our comparison be accepted as the equivalent of the squirrel track. Lansdowne Passage has the early Georges in every brick and paving-stone. It is only a few feet in width. It is paved like the floor of a dungeon, and the walls that gird it in are of appalling height. There is a little gate at each end, a sort of little turnstile which does not turn, and there is a little flight of steps at the end that opens upon Berkeley Street just where Berkeley Street touches Berkeley Square; and as one passes through, he might fancy he hears the rustle of the dresses of the prim ladies in the early Georgian time, and sees the stiff stocks and pigtails belonging to the military heroes of that period. Lansdowne Passage tells of the Georges as Kensington in some of its old quarters tells of Queen Anne, or the Tower reminds us of Mary and Elizabeth and Jane Grey.

Geraldine Rowan, although, as we have said more than once before, delighting in all the associations of early London, and loving to find everywhere some memory of a great name, or a past day, or a pretty story, was not concerning herself much about

Georgian times or any reminiscences that might properly belong to the little pavement she trod when she entered Lansdowne Passage at ten o'clock that quiet beautiful summer night. She was only thinking of the venturous expedition she had come on, and the strange risk she ran. This was a very different thing from calling on Mr. Montana in the bright bustling hours before dinner. This expedition was under cover of night, although a night well moonlighted, and there was mystery about it. It had the air of an assignation. It could hardly be justified in the eyes of any sober and prudent elders whatever. Hardly, she thought, would her own mother have easily pardoned her for doing such a thing as this. And yet, what else could she do? She had thought the matter over again and again, and there seemed no way out of it but to make this venture. There was no other hope of extricating poor Melissa from a difficulty that indeed might come to be a great danger in the end. Geraldine felt that she was really running a risk, possibly making a sacrifice, to help her friend, and that thought made her only feel proud and resolute. She would not turn back now. She would see the thing out, come of it what might.

Mr. Montana was punctual. Geraldine had hardly emerged from Lansdowne Passage into Berkeley Street when she saw that he was waiting at the corner of Berkeley Square. He came towards her at once. Just at that moment it so happened that Lady Vanessa Barnes was returning in her brougham from a dinner-party, and on her way to spend the evening in one of the streets near Berkeley Square. Montana had sat next her at dinner that day, and she had particularly asked him to come and talk to her in the drawing-room afterwards. He had excused himself, saying he had to leave early, and had not appeared in the drawing-room at all. Lady Vanessa was vexed, found the affair dull, and left early. Now she saw Montana standing at the corner of Berkeley Square as if waiting for some one. She made her coachman drive slowly; she was a young woman endowed with much curiosity, and not always particularly scrupulous about the gratification of it. In a moment she saw a woman come out through the gate of Lansdowne Passage, and saw Montana hasten to meet her. They began to walk slowly round the square, on the path by the gardens, where a great plaster nymph or naiad, or some such personage, is doing something with an urn. Lady Vanessa drove round the square two or three times, and still saw them walking slowly, apparently in deep and confidential conversation. Once the girl looked round, and might have seen Lady Vanessa, but that Lady Vanessa drew back.

Lady Vanessa saw her plainly. She was astonished, shocked, highly amused.

“So this is my little American girl,” she thought as she drove away, “who is so highly independent of the world’s ways, and knows so well how to take care of herself ; and this is my saintly Montana ! I shall open that girl’s eyes a little, and let her see what a silly thing she is doing. I think my saint might have more sense, at his time of life, than to make midnight assignations with a girl in a square in London.”

It was not exactly midnight, but midnight would do well enough for Lady Vanessa.

(To be continued.)

THE GREAT FIRE OF LONDON.

"Oh, the miserable and calamitous spectacle! such as haply the world has not seen the like since the foundation of it, nor be outdone till the universal conflagration."—JOHN EVELYN.

"Lord! What a sad sight it was by moonlight to see the whole city almost on fire, that you might see it plain at Woolwich as if you were by it."

SAMUEL PEPY

"1666, 2nd September. This fatal night, about ten," writes chatty John Evelyn in his memoirs, "began that deplorable fire near Fish Street, in London." How the fire originated we know not, but the flames were first seen to issue from the shop of French baker, near London Bridge. The progress of the conflagration was fearfully rapid; for everything, it seemed, had conspired to lay the city in ruins. The season had been an exceptionally dry one; a fierce easterly wind was blowing all the while, thus encouraging the fury of the flames; the houses, closely crowded together and built entirely of wood, were incapable of opposing any resistance to the enemy; there was, as there had always been until within comparatively recent times, a terrible lack of water in the city; whilst the engineering appliances to cope with so devouring an element were of the feeblest character. Writers, chiefly foreigners who visited our shores, had frequently raised their voices in warning against the dangers to which we were then exposed from fire. They pointed to the absence of brick and stone in our dwellings, to our narrow streets, to our houses pressing one upon the other without plan or arrangement in their construction, to our want of wells and water supply, and to the lack of men specially trained to fight against a severe conflagration, and keep it under. "You may fear the Dutch," said one, "but a fire in your midst will work you more hurt than all the fleets of Holland and France together."

This prediction was now to be fulfilled. Before the morning of the third of September had dawned, all the houses and wharfs on the banks of the Thames, on the Middlesex side, had crashed down and were one heap of charred ruin. The numerous winding streets which run from Cornhill to the Tower were one mass of

smouldering rafters and wrecked goods and chattels. Then rapidly licking their way, the forked flames sped their lurid course due west—up the Poultry, up Cheapside, around the sacred edifice of St. Paul's, down Ludgate Hill and the neighbourhood of Newgate, along Fleet Street and Warwick Lane, till it reached the Inner Temple; the fire, like a swollen river that has burst its dam, and scorns all opposition, swept everything before it. For a moment the flames crossed towards Whitehall, but the wind changing, they were beaten back to complete their work of havoc in the east. From the Temple to the Tower, north and south, east and west, the city was as if it had been laid waste by the enemy. What had once been flourishing streets and imposing structures were now acres of vacant spaces, strewn with smoking rubbish, charred furniture and household stuff and dead animals. Here and there, some partly hidden beneath the blackened rafters of fallen buildings, and others lying stark and exposed upon the smouldering heaps of wreck, were a few corpses. St. Paul's, that "goodly church," was a sad ruin. The fine halls of the different City companies were levelled to the ground. The statues, in the Royal Exchange, of the English sovereigns since the Conquest had been calcined by the heat, and had then burst into a thousand pieces. The fountains, the favourite places of gossip of an evening of the apprentices and the City maidens, were dried up, whilst the water in their basins was hissing forth its heated vapours. All the cellars and warehouses, whose crowded goods constituted so much of the wealth of the city, were being consumed, and darkened the sky by their spasmodic belchings of black and acrid smoke. "So that in five or six miles traversing about," says Evelyn, "I did not see one load of timber unconsumed, nor many stores but what were calcined white as snow."

"I am too much affected," writes an anonymous correspondent to one Pedder, at Newport,¹ "with the deplorable sight of London's ruin ever again to value the things of this world, seeing all man's labour and riches but a portion that an hour may consume. I heard many cries and complaints, but some gave glory to God in the fire, and wished the portion consumed had been more laid out for His glory. In three days the most flourishing city in the world is a ruinous heap, the streets only to be known by the maimed remainder of the churches. These differ about how it began; but all agree that it was the anger of the Lord for the sins of the people: yet the great ones, like Israel of old, say, 'The bricks are fallen, but we will build with hewn stones.' Pestilence and fire have come; Jesus the Lord

¹ *State Papers, Domestic.* September 13, 1666. Edited by Mrs. Green.

will empty His quiver of wrath unless the nation improve its privileges. I have lost nothing in the fire : the people are quite stupefied and surprised by it."

On the first shooting forth of the flames and the cruel rapidity with which they bore down everything that barred their devastating progress, the inhabitants were utterly paralysed with terror. They appeared incapable of all thought and action. "The conflagration," writes Evelyn, "was so universal and the people so astonished that from the beginning, I know not from what despondency or fate, they hardly stirred to quench it ; so that there was nothing heard or seen but crying out and lamentation, running about like distracted creatures, without at all attempting to save even their goods. Such a strange consternation there was upon them, so as it burned, both in breadth and length, the churches, public halls, Exchange, hospitals, monuments, and ornaments, leaping after a prodigious manner from house to house and street to street at great distances one from the other : for the heat, with a long set of fair and warm weather, had even ignited the air and prepared the materials to conceive the fire, which devoured, after an incredible manner, houses, furniture, and everything. Here we saw the Thames covered with goods floating, all the barges and boats laden with what some had time and courage to save ; as, on the other, the carts, &c., carrying out to the fields, which for many miles were strewed with movables of all sorts, and tents erecting to shelter both people and what goods they could get away. Oh, the miserable and calamitous spectacle ! such as haply the world had not seen the like since the foundation of it, nor be outdone till the universal conflagration. All the sky was of a fiery aspect, like the top of a burning oven, the light seen above forty miles round about for many nights. God grant my eyes may never behold the like, now seeing above 10,000 houses all in one flame ! the noise, and cracking, and thunder of the impetuous flames, the shrieking of women and children, the hurry of people, the fall of towers, houses, and churches was like an hideous storm, and the air all about so hot and inflamed that at last one was not able to approach it, so that they were forced to stand still and let the flames burn on, which they did for near two miles in length and one in breadth. The clouds of smoke were dismal, and reached upon computation near fifty miles in length. Thus I left it this afternoon burning, a resemblance of Sodom or the last day. London was, but is no more !"

The first shock over, the courage of Englishmen was restored to panic-stricken London, and energetic measures were at once adopted

to crush the terrible foe that had so suddenly and with such malignant force made its presence felt. Constables were stationed at Temple Bar, Clifford's Inn, Fetter Lane, Shoe Lane, and Cow Lane. At each of these five posts soldiers were on guard under the command of a "good and careful officer and three gentlemen," who had power to grant one shilling to such as had been diligent in putting out the flames all night. Five pounds in bread, cheese, and beer, were allowed to the men at each post. The trained bands were called out to protect the people's goods in Lincoln's Inn Fields, Gray's Inn Fields, Hatton Garden, and St. Giles's Fields, and a "great officer" was told off to see that these orders were properly executed.¹ Instructions were sent to the magistrates for Middlesex to procure workmen and tools; the militia of Middlesex, Surrey, and Hertfordshire were called out, "for prevention of unhappy consequences;" and the crisis was considered so dangerous that the presence of Monk, Duke of Albemarle, who was then in command of the fleet, was keenly desired by the agitated Londoners. "If my Lord General," writes Lord Arlington to Sir Thomas Clifford, who was then with the fleet, expecting to give battle to the Dutch,² "could see the condition we are in, I am confident, and so is everybody else, he would think it more honour to be called to this occasion than to be stayed in the fleet where it is possible he may not have an opportunity of fighting the enemy; but here it is certain he will have it in his hands to give the king his kingdom a second time, and the world see therein the value the king makes of him." Monk complied with the royal wishes, but the fire was extinguished before his return; in his capacity of Lord Lieutenant of Middlesex he however assisted in the subsequent precautions to restore order.

To aid the distressed and to open store-houses for the reception of goods, a proclamation was now issued, ordering that for the supply of the destitute bread was to be distributed gratuitously at the markets held in Bishopsgate Street, Tower Hill, Smithfield, and Leadenhall Street (for the ordinary markets had been destroyed), and that all churches, chapels, schools, and public buildings were to be thrown open to receive the goods of those persons who did not know how to dispose of them.³ No difficulty was experienced in obtaining volunteers to help in extinguishing the flames: the whole population was knit together by the closest of all ties, that of a selfish fear. No one knew but that his own house might be the next victim, and the consequence was, that men

¹ *State Papers, Domestic.* September 3, 1666.

² *Ibid.* September 4, 1666.

³ *Ibid.* September 5, 1666.

of all ranks hastened to contribute their personal efforts to quench the fire. The king and his brother were most active during this anxious time. "He and the Duke of York," we are told,¹ "frequently exposed their persons with few attendants, sometimes even intermixing with those who laboured in the business."

But it was in the removal of his hardly-saved goods that the citizen was most perplexed. The villages around the City—Kingsland, Hackney, Highgate, Edgware, Finchley, and other suburbs—were thronged with rich and poor, guarding the different household goods they had managed to snatch from the avarice of the flames. It was the object of all who had been fortunate enough in saving any property to have it at once carried to a place of security : to effect this was however no easy task. Labour was in such demand, and vehicles of any description were so scarce, that "four pounds a load to a carter, and ten shillings a day to a porter," were deemed small wages.² From the numerous petitions presented to the king for relief, to be found among the State Papers, we can form some idea of the misery and distress which followed in the wake of this wholesale wrecking of property. The parish churches were destroyed, the pew-rents lost, yet the poor were thrown upon the hands of the clergy and clamoured for relief. The clothiers of Coventry were ruined, for "their whole estate of cloth" had been stored in the city warehouses. Book-binders, printers, and artificers of all descriptions had lost their entire stock-in-trade, and were left completely destitute. Ships heavily laden with goods in the docks and the river had been set on fire, and their captains, considering that they had a claim on the government, petitioned the Council for help. Landlords whose houses had been gutted by the flames were beggared. Aldermen and merchants, whose cellars had been stocked with valuable produce, found themselves, within the short space of three days, deprived of the fruits of a lifetime of anxious and honest toil. On all sides we read of nothing but want, ruin, and prayer for relief. "M. Leroy, jeweller, has had great losses on the fire, and wants to be paid for a diamond ring of the Countess of Castlemaine." John Ogilby, bookseller, asks for a licence to import paper largely from France, to replace stock destroyed after twenty years spent "in setting forth several books in a more noble and heroic way than hath been heretofore done in England." Nathaniel Hubert petitions for "an order to the Admiralty Court to take him from Newgate prison, where he lies perishing, and send him to sea, to

¹ *State Papers, Domestic.* September 8, 1666.

² *Ibid.* September 6, 1666.

which he was condemned because in removing the goods of one Serskall during the fire, receiving no reward, he detained goods value 3s. 6d., since restored." One disinterested person, anxious to make a private claim conducive to public utility, sends in a "Proposal to prevent mischief from aliens, who are suspected to have had a hand in burning the city, by a grant to the writer, on consideration of his sad condition after represented, of a patent whereby no foreigner would remain a night without full information whence he came, where he lodges, &c., and the same of subjects not at their own homes, so that robberies, murders, and other mischiefs may be prevented or discovered." Of all these petitions relating to losses in the fire, perhaps the oddest is the following from John Middleton, serjeant-at-arms, "for restoration of his setting-dog taken from him with affronting language by Viscount Cranborne, being seized in the manor of Essenden, Herts, has always kept a setting-dog according to his ancient right."¹

The only persons who derived benefit from the calamity were those who had nothing to lose. The beggars, the cut-purses, the predatory tramps, the nocturnal prowlers availed themselves to the full of the opportunities which the darkness and desolation around now offered them. They pilfered such goods as they could conveniently carry away with them. They made raids upon the poor who were feebly endeavouring to protect the little they had saved from the flames. Under cover of the smoke, they entered burning houses and seized upon any valuables that came within their reach. Nor did they scruple to stab and then rob those who crossed their path in the purlieus of Thames Street, and whose dress and appearance betokened them to be prizes worth securing. Though constables, the trained bands, and militiamen patrolled the streets, the ruin was so great and the confusion so bewildering that it became no difficult task for the robber and the assassin to escape undetected to his haunts and in safe possession of his booty. "There are many people," writes one James Hicks,² "found murdered and carried into the vaults amongst the ruins, as three last night, as I hear, and it is supposed by hearty fellows that cry, 'Do you want light?' and carry links; and that, when they catch a man single, whip into a vault with him, knock him down, strip him from top to toe, blow out their links, and leave the person for dead; and an apothecary's man in Southwark, coming into Fenchurch Street, being so served, and being left for dead, when these villains had done, struck fire with a tinder box,

¹ *State Papers, Domestic.* September, 1666.

² *Ibid.* December 12, 1666.

which they took out of their pockets, lighted their links, and away, and by the glimpse of their lights, as the story goes, the man perceived a dead body lying by him in the said vault. When the murderers were gone, the young man made shift to get out, from whom this relation is spread, and a woman dead in the vault was found. For want of good watches, no person dare, after the close of the evening, pass the streets amongst the ruins."

So terrible a disaster as the fire of London caused the wildest excitement in the provinces. It was a time of great ignorance and suspicion, and as the means of communicating the real state of the case were very limited and imperfect, the most strange reports got abroad. As the news travelled through the country, we can see the dismay it occasioned. From West Cowes, one John Lysle "supposes the sad fire in London was chiefly caused by fanatics and strangers, and complains of the French and Dutch strangers who resort to the Isle of Wight. Guards should be kept at landing-places, some trusty person employed to search for and take the names of lodgers in houses, and no stranger allowed to come into the island without good testimonials for fear of a similar accident. The number of 80,000 French, Dutch, and other strangers, said to be in London, may bring all to destruction." "The doleful news of the firing of London," writes one from Dover, "makes the same thing feared here, as the Dutch fleet lie in sight taking in men before Boulogne." At Walmer, "the generation of fanatic vipers will report the fire as God's revenge for Englishmen's valour at Vlie."¹ From Yarmouth, we hear that "a French seaman is before the bailiffs for saying, when told of the fire of London, that it were good news if Yarmouth were on fire. He spoke those words in plain English, but on his examination will not own that he can speak a word of English. Most here judge the city was wilfully set on fire by the French and Dutch who lurk about it" "There is great fear in these parts," writes Lord Carlisle from Naworth, "the post not coming as usual, and there being a rumour of a great fire in London. I will set forward thither on Friday, unless ordered to remain. I have just heard that the city was set on fire by Anabaptists and other disaffected persons, and have ordered the trained bands to meet and continue in convenient

¹ After the defeat of the Dutch fleet, July 25 and 26, 1666, the English, absolute masters of the sea, rode in triumph along the coast, and insulted the Hollanders in their harbours. A squadron, under Sir Robert Holmes, entered the road of Vlie and burnt two men-of-war and a hundred and forty merchantmen, together with the large village of Brandaris; the whole damage was estimated at several millions sterling.

places for the safety of the country." At Chester, they were "all in amazement at the heavy judgment fallen on London, which is concluded to be a total devastation and destruction of the metropolis." At Hull, the "doleful tidings" that the Dutch had set fire to London arrived; consequently "the governor has had strong guard set, both by soldiers and townsmen, on the town and the ships in the harbour, causing the masters and their companies to lie aboard. He has secured suspected persons and will turn them out of town, and has committed to close custody all the Dutch prisoners that were out on bail." "On the news of the sad fire in London," we learn from Norwich, "the Mayor ordered the bellman to cry about the city, to give innkeepers notice not to lodge strangers till he had examined them, nor to allow them to go out of the city without his order; also for inhabitants not to lodge strangers without knowing whence they come." The country was evidently in a highly nervous condition, and every country town feared that it was about to share the fate of the metropolis.¹

As soon as the flames had been got under, and all fears of a further outbreak removed, the first step of the Council was to institute an inquiry into the cause of the fire. Upon this point the nation was divided into three distinct sets: those who attributed the fire to the designs of the French, the Dutch, and the Papists; those who attributed it to the vengeance of an offended Deity at the open sin which was allowed to reign supreme in high places; and those who, like sensible persons, believed that the fire was entirely due to accident and to the combustible nature of the materials with which the houses were then built. The first section were, however, in a large majority. Wading through the vast correspondence of this period which has been preserved by the State, almost every letter which alludes to the subject lays the ruin of London at the door of the foreigner and the Papist. In the different towns in the kingdom the Catholics were keenly watched, whilst Frenchmen and Dutchmen were haled before the magistrates, and might consider themselves fortunate if they were not at once committed to gaol as suspicious characters. The wildest rumours were circulated, and in some places it was dangerous for a foreigner to show his face. Witness after witness came forward and swore to having seen Frenchmen and Dutchmen wandering about the country, throwing fire-balls into the open windows of houses. Numbers of innocent persons, but who had the misfortune to profess the creed of Rome, were seized on "eminent suspicion," and found to have on them "several fire-

¹ *State Papers, Domestic.* September 5-13, 1666,

balls as large as tennis balls." In Warwickshire and Leicestershire suspicion seems to have been very much on the alert, owing to a curious form of theft. Sheep were stolen from the meadows ; "strange robberies have been committed, many sheep having been killed in the fields, and only their tallow taken away ; this was thought to be intended for the making of fire-balls, and one malefactor was apprehended who said that he did it through poverty, and sold the tallow." The harshest conclusions were drawn from the flimsiest of premisses.

To be a foreigner was to be an incendiary ; to be a Papist was to be a plotter against English security ; to be seen with a ball in the hand was to be the owner of a fire-ball. "It is impossible," writes one Ralph Hope from Coventry,¹ "to persuade the people into any other belief than that the Papists have a design to rise and cut their throats, and they impute the late sad conflagration solely to their continuance and propagation ; this has been insinuated by what has happened at Warwick. A boy gathering blackberries sees a man doing something in a ditch, who hastily puts something into a bag and goes away ; the boy finds at the place a blackish brown ball, and carries it away before the Deputy-Lieutenants there met. There is no appearance of anything combustible in it, but all take it to be an unfinished fire-ball ; the boy describes the man and takes his oath ; the whole town takes the alarm ; hue and cries are sent out everywhere to take the man, but in vain ; the town is in a tumult all day, every man in arms, besides the militia horse keeping strict guard all night. Next day Sir H. Pickering, with his troop, dismisses the horse guard, and commands the townsmen home : they peremptorily refuse to obey, and after some high words, tell him, for aught they know, he had a design himself to betray the town. Sir Harry grows angry, and commands the troops to fire unless they disperse ; the townsmen dare them to do it, cocking their loaded muskets, so that, had not the prudence of some prevented, much mischief had been done. The tempest calmed at last, and the townsmen by degrees dropped home. Though the Mayor of Warwick says it was a fire-ball, an ingenuous gentleman says it was no such thing. The Papists thereabouts are well-armed, and have frequent and suspicious meetings. The trade of killing sheep and taking out the tallow only is still followed in several places thereabouts."

The truth was, the country was in one of her most feminine moods. She had come to the conclusion that the fire was due to the Papists, incited by the Dutch and French, and nothing would convince her that her suspicions were strained and groundless. She declined to

¹ *State Papers, Domestic.* September 15, 1666.

listen to evidence or to weigh arguments ; it was as she had said, and there was an end of the matter. In vain the Government announced "that, notwithstanding that many examinations have been taken with great care, by the Lords of the Council and His Majesty's Ministers, yet nothing hath been yet found to argue it to have been other than the hand of God upon us, a great wind and the season so very dry."¹ The popular excitement refused to be satisfied. Rumours of Popish plots were rife throughout the kingdom. It was said that designing Catholics were hidden in country houses, that they held secret meetings in the taverns of the villages, and that they bribed the watchmen to take no notice of their proceedings. A letter was intercepted from Paris exhorting the English Catholics to rise and fire the remainder of London. A chambermaid at the "Unicorn" inn, at Banbury, was brought up before the justices of the peace, and said that certain foreigners had stayed at the inn, that she overheard them whispering, and one said, "When we have done our mischief we will take our horses and ride out because we should not be thought to have a hand in it, and afterwards will come in again and bemoan their condition that they may conclude that we have no hand in it. Then they read a paper, and talked of what the rich devils would do when they saw fire about their ears, and said their charges would be borne, and that they would want no money when in London." One unhappy Frenchman, Robert Hubert by name, confessed to having "fired London," and was executed at Tyburn, "but denied the fact at the gallows, though before he had stood obstinately to it, and would hardly have been believed on account of his varying answers, but that he took his keeper to the place he had so long affirmed that he fired, and it was the very house where the flames first broke out." There is little doubt but that this Frenchman was one of those persons, which seasons of great excitement invariably produce, who out of love for notoriety accuse themselves of offences of which they are perfectly innocent. The country was thoroughly alarmed and informers everywhere readily appeared to give evidence. One charming youth, only ten years of age, an apothecary's errand-boy, accused his father and mother, John and Mary Taylor, of York Street, Covent Garden, of having helped to fire the city, and of having taken him down to Acton to burn a house in that village ! Throughout the principal towns, guiltless persons suspected of having fire-balls in their possession were frequently arrested and confined in the city prison. It was scarcely possible for strangers to stand about in groups, or to enjoy an earnest conversation, without being looked

¹ *State Papers, Domestic.* September, 1666.

upon as Papists or plotters. Guests on arriving at an inn were searched, their names written down and then severely cross-examined as to their future proceedings. England was more like a city in a state of siege than a free country.¹

To calm this agitation, the rigours of intolerance were freely invoked. For those outside the pale of the Church of England there was no security. It was impossible for one who was an Anglican to treat with an enemy or to plot for the overthrow of the city; but with a Papist, a Quaker, a Dissenter, every treachery and diabolical undertaking were within the compass of his creed. All priests and Jesuits, at the express wish of the House of Commons, were expelled the country. The laws against Roman Catholics were rigidly enforced. A vote was passed that members of the House of Commons were to receive the Sacrament according to the Church of England, on penalty of imprisonment. All who refused to take the oaths of Supremacy and Allegiance were to be disarmed. Quakers and other Nonconformists were sent to prison, and their numerous petitions for release constitute no small portion of the State Papers of this period. In Holland it was said that the Court had set fire to London, whilst in Padua an account of the conflagration was circulated in Italian, the most remarkable portion of which is that "at Moorfields the King, the Duke of York, and nobles, came to see Charles the First avenged, but, moved with compassion, stimulated the people to exertion by working themselves."²

London, east of the Temple, being one mass of ruins, the first matter to be attended to, now that the flames had been got under and the national fears and prejudices fully avenged by the imprisonment of foreigners, Papists, and Dissenters, was the re-building of the city. Accordingly His Majesty issued a declaration, "To his City of London, upon occasion of the late calamity by the lamentable fire." No man's loss in the late fire, said Charles, was comparable to his; yet he hoped to live to see a much more beautiful city than the one that had been consumed, and one well provided against accidents by fire. There must, therefore, he directed, be no hasty re-building. Should any persons, on pretence that the ground was their own, erect "unskilful" houses, the Lord Mayor was authorised to give orders to have the same pulled down. Brick having been found to resist and even extinguish fire, all houses were for the future to be built of brick and stone, with strongly-arched cellars in the basement. The principal streets were to be broad and open, and no alleys

¹ *State Papers, Domestic.* October-December, 1666.

² *Ibid.* October 22, 1666.

allowed unless absolutely necessary. No houses were to be erected within some feet of the river, and those built were to be "fair structures for ornament." Brewers, dyers, sugar-bakers, and others whose trades were carried on by smoke, were to dwell together in some quarter to be specially assigned to them. (Thus, even in the seventeenth century, the desirableness of a fair river frontage and the nuisance of smoke were at least recognised—we certainly have taken our time in acting upon these sensible ideas.) A survey was to be made of the whole ground, and each person was to have his land secured him by Act of Parliament. With regard to the rebuilding of the churches, they were to be recommended to the charity of well-disposed persons. His Majesty then concluded by promising that "those who shall erect any buildings according to this declaration" shall have the hearth-money duties remitted for seven years.¹ The following year the Rebuilding Act (19 Chas. II. c. 3) was passed.

The loss occasioned by the Great Fire of London was estimated at 13,000 houses, 89 churches, including St. Paul's Cathedral, and property to the amount of nearly ten millions sterling.

ALEX. CHARLES EWALD.

¹ *State Papers, Domestic.* September 13, 1666.

COLONIAL ANIMALS AND THEIR ORIGIN.¹

PART I.

AMONGST the many aspects in which the biologist is accustomed to view the universe of life, few possess a greater interest than that which deals with the nature of animal and plant personality, and with the structural philosophy of the living frame. It is not sufficient for the due investigation of living structures that the forms of animals and plants be compared, and their more obvious differences and peculiarities noted and recorded in scientific annals. Such details and such procedure suffice perfectly for the ordinary run and course of biological work, and form, no doubt, the source of the every-day knowledge on which natural-history science grows and progresses. But a higher era of scientific thought intervenes when philosophy, in its search after relationships and causes, steps forward to correlate and utilise the knowledge observation has acquired. The higher questions of cause and origin are not solved by observation alone. It requires and demands the power of placing facts in appropriate light and shade ere the mutual relations of these facts can be determined, and before their place in the *systema naturæ* can be definitely ascertained. Judged by this criterion and standard, there are some topics of biology which altogether belong to the region of the abstract and the transcendental. Patient industry may discover, for instance, that a crayfish within the egg repeats, as a stage in its development, the likeness of a form represented to-day by the adult state of some lower crustacean ; but it requires philosophy of a transcendental kind to see what that fact means, and what such a discovery implies to the universe of life around. One may perfectly appreciate by ordinary observation that a horse walks on the single toe of each foot, and that its two "splint-bones" represent useless rudiments of other two toes ; but it is through an exercise of abstract science alone that we can form the concept of a single-toed horse having

¹ A Friday Evening Discourse delivered before the members of the Royal Institution of Great Britain, February 4, 1881.

arisen from a three-toed one ; and from the latter phase of development extend a like thought to that of other living beings. The applications of philosophy to the facts of nature remind one strongly of the most singular and mysterious work of that nature in the production of the living thing itself. In the performance of that function, we require a certain quantity of the substance called "formative material" by the learned in biology, and "protoplasm" by the simple-minded amongst us. This material contains all that is required for the formation of the living frame in so far as the material of that frame is concerned. But in protoplasm alone, we do not find all that is demanded for the growth of the new being. We require, likewise, activity of some kind—potential or real, chemical, physical, or vital, or all three combined ; and we depend upon this activity for the combination of the elements of our germ and for the power whereby that germ will in time blossom out into full fruition. So is it, in truth, with the application of knowledge, and with the evolution of the wisdom which arranges our knowledge in its due array. The knowledge we gain is, after all, in itself pure material on which the potential power of philosophy must exert its influence ere the results of seeking and finding wisdom be fully appreciated. The evolution of a natural fact, or set of facts, to take its place in the array of knowledge we name a science, is therefore matter of higher development than that which merely discovers the facts themselves. Only when philosophy has touched the inert mass of detail, does the harmonious and arranged system spring into view with its power of truly adding to man's knowledge of the universe around and overhead. Only when the search for causation has begun, can our intellectual gains be fully appreciated in our labour of

Untwisting all the chains that tie
The hidden soul of harmony.

Such a topic as presents itself to view in the individuality of animals belongs, it may be with all truth affirmed, to the domain of the philosophy which applies knowledge, rather than to the sphere of mere fact and observation itself. This declaration might sufficiently prejudice the subject in the eyes of readers who might be given to view with suspicion any opinion which apparently lowered fact in the scale of credence. But the philosophy we eulogise, bases its existence on the facts we value. It is the mint-stamp of knowledge, which impresses fact with its popular and received value ; inasmuch as, without such impress, the fact itself, however valuable, fails to relate itself to its neighbour truths. Hence, if, in the present paper, one may venture somewhat within the domain of transcendentalism, it

may readily be shown that from the sober basis of facts all our philosophy in reality takes origin. By way of at once illustrating this latter proposition, as well as of laying the foundation-stone of our present study, we may enter upon a recital of the facts of individuality as represented in the living series around us.

A superficial acquaintance with the facts of natural history serves to demonstrate the truth of the axiom that every animal originates, directly or indirectly, in that reproductive body we term an "ovum" or "egg." As the result of the development of that egg, the animal body becomes the adult; and of the plant the same truth holds good. The seed or germ undergoing development, and passing through stages which are, as a rule, of well-defined nature, at last appears before us as the perfect plant, which in its turn will produce blossom and fruit, and will finally lead us back once more to the seed and germ. One marked and very obvious difference between high animals and low animals is found to exist in the different results to which development leads. The lower animal's growth ceases, and its adult condition is affirmed, at a stage when the development of the higher being has barely begun. It takes but

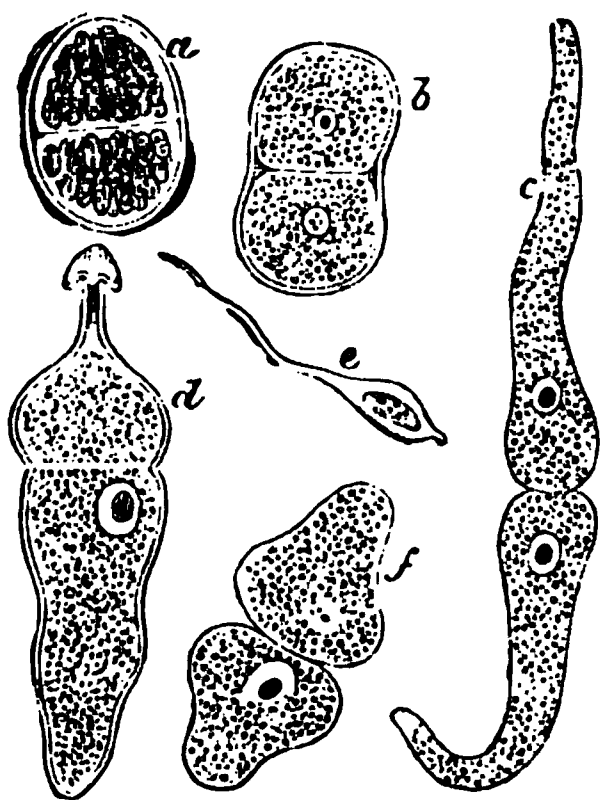


FIG. 1. GREGARINA AND ITS DEVELOPMENT.

little trouble on nature's part, so to speak, to convert the matter of life of a low animal or plant into a form like itself; whilst, on the other hand, the development of a higher animal means time and trouble, to use a familiar expression, and entails the elaboration and building of a complex body from that which is invariably in its first stages uniform and simple in structure. Such an animal form as a *Gregarina* (Fig. 1, *d*), for instance, presents us with a good example of that simplicity of development and that primitiveness of personality which marks the lower fields of animal life. A gregarina is a minute

speck of protoplasm found inhabiting the digestive canal of worms, insects, and crustaceans, as an internal parasite. Each gregarina lives what may be described as the simplest form of existence. Living in the digestive system of its host, it literally lies bathed amidst the nutriment which that host is elaborating for the repair of its own tissues. Possessing no traces of any of the organs belonging to higher animal existence, the gregarina lives by the absorption of

the digested foods of its host ; and save for the slow contractions which are sometimes seen to pass in waves along the surface of its body, no movements can be observed whereby its animality might be popularly confirmed. The course of gregarina-development is by no means complex. The body itself, in lieu of an egg or germ, will, sooner or later, become of globular shape (*b*). The little solid body, or "nucleus," seen normally (*d*) in its interior, will vanish by a kind of physiological necromancy, and the body-substance itself will break up and divide into spindle-shaped masses (*a*), for which the thickened rim or margin of the body forms a covering. Then this globular body-margin ruptures ; the little spindles of protoplasm escape therefrom ; and finally each develops, with but little further change, into a gregarina like that from which it was derived.

Now, such a life-history as this is instructive, especially when viewed from the stand-point of animal individuality. The single gregarina is seen to break up into numerous other gregarinae, each of which repeats at first the single state, and then the process of division into particles which characterised its parent. Each gregarina, then, may, in natural-history language, be named a "persona," or "person" —that is, it is a single or "individual" animal ; representing in itself, even as does each of the higher animals, a defined and component element of the animal world. A like remark might be made of many other lower forms of animal life.

An *Amœba* (Fig. 2), which differs from a gregarina chiefly in that it possesses an active power of locomotion by pushing out its body substance into long processes, is likewise a single "individual" animal, which represents, as an oyster or a bird does, a well-defined unit quantity in the sum total of the living series. There is, however, one important epoch in the life of both gregarina and amœba, when each organism—for both exhibit essentially the same course of development—shows a tendency to lose its indi-

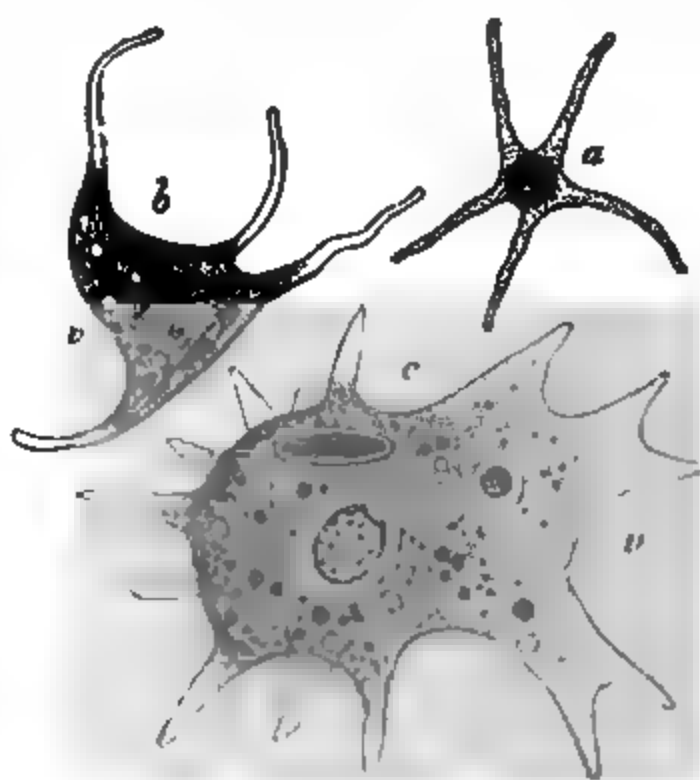


FIG. 2. DIFFERENT FORMS OF AMŒBA.

viduality in the division of its body to form other individuals. At one stage in its development, namely, when filled with the miniature "spindles" (Fig. 1, *a*) into which it has divided itself, the gregarina or amoeba in reality becomes a colony or aggregation of beings. But such a tendency is at the most transitory, and the temporary colony speedily resolves itself into a diffused and separated mass of young organisms, whose individuality, and indeed whose whole existence, is due to the destruction of those of their parent. In another sense, the amoeba may occasionally show this tendency to lose its single and defined individuality in that of the compound colony. For occasionally particles or offshoots of the amoeba's protoplasmic body detach themselves therefrom, and pass away like precocious emigrants from the parent-frame to assume all the functions of amoebæ on their own account. In this way, and through the exercise of the simplest reproductive process we know of—namely, that of "fission," or simple division of an animal's body into two or more new beings—the amoeba-body converts itself from a single "individual" into a mother-colony, with offshoots and emigrants seeking a life and existence of their own. And, last of all, in the gregarina itself, we may find certain important variations in structure which seem to threaten the destruction of the individualism of its body, and to merge the individual in the crowd. For we know not merely of gregarinæ which consist apparently of but one mass of protoplasm, as already described, but of others which exhibit a division of body into two (Fig. 1, *a'*) or even three compartments. What the significance of this tendency to division or segregation may be, is yet matter of conjecture; but at first sight its meaning would seem to foreshadow the same destruction of individual constitution which, in their development, these organisms unquestionably exhibit.

Even in the lowest animals, each consisting of a minute mass of protoplasm, there is thus observed a tendency, at some period or other of their life-history, to depart from the single state, and by division, or, as it is named, "segregation," of their substance, to form a "colonial" or compound organisation. But even in the lower confines of animal life, which harbour the amoebæ and gregarinæ as typical tenants, are represented states and phases of organisation which are purely and typically "colonial." Thus, that low form of life known as *Myxodictyum* normally exists as a collection of protoplasmic particles, such as would be exactly imitated if a number of amoebæ banded and fused themselves together. It is equally interesting to note that the vast majority of the *Foraminifera* (Fig. 3), or "chalk-animalcules," are to be regarded as exhibit-

ing a compound constitution. For, in these animalcules, which are as a rule of compound nature (Fig. 3, *b*), the growth of new divisions of the shell takes place by a process of budding, and through the production of new protoplasmic units which remain organically connected with the original mass. Nor are the lowest plants to be left out of consideration in this recital of primitive colony-making. The cryptogamic botanist well knows certain green specks of microscopic size, each called *Chlamydomonas*, which swim freely in fresh waters, by means of two long cilia, or miniature eyelashes, projecting from one extremity of the body. Now, there exist in stagnant waters certain other curious bodies, long known as "Globe-animalcules," before they were ascertained to be lower plants. Each of these bodies is scientifically named a *Volvox* (Fig. 4, *d*), and

appears to consist of a hollow globe or sphere, covered with innumerable little specks of bright green, and swimming freely through the water by the waving action of the fine cilia which fringe its body. More minutely examined, this rolling globe is found to

consist of a collection of little green bodies, each of which, in all essential details, exactly resembles a single *chlamydomonas*. The filaments fringing the volvox

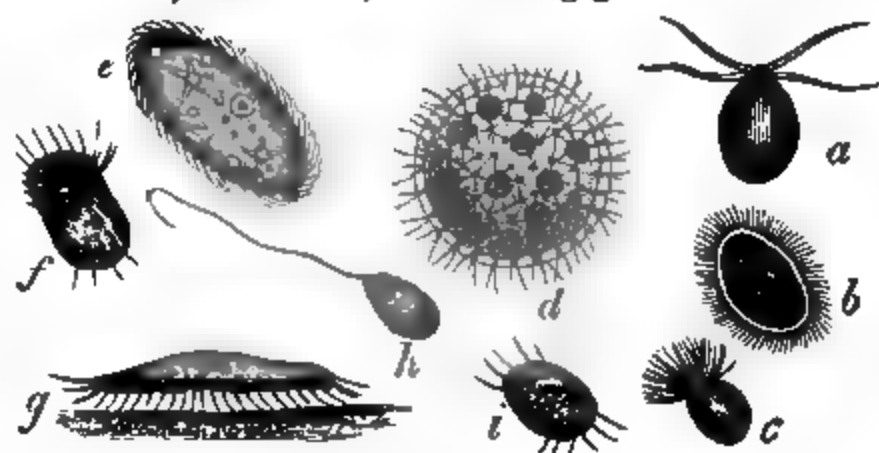


FIG. 4. VOLVOX (*d*) AND VARIOUS ANIMALCULES.

are in reality pairs of cilia like those of *chlamydomonas*, and are attached to the little green bodies aforesaid. Thus volvox, so far from being an animal, is, firstly, a rootless lower plant; and, secondly,

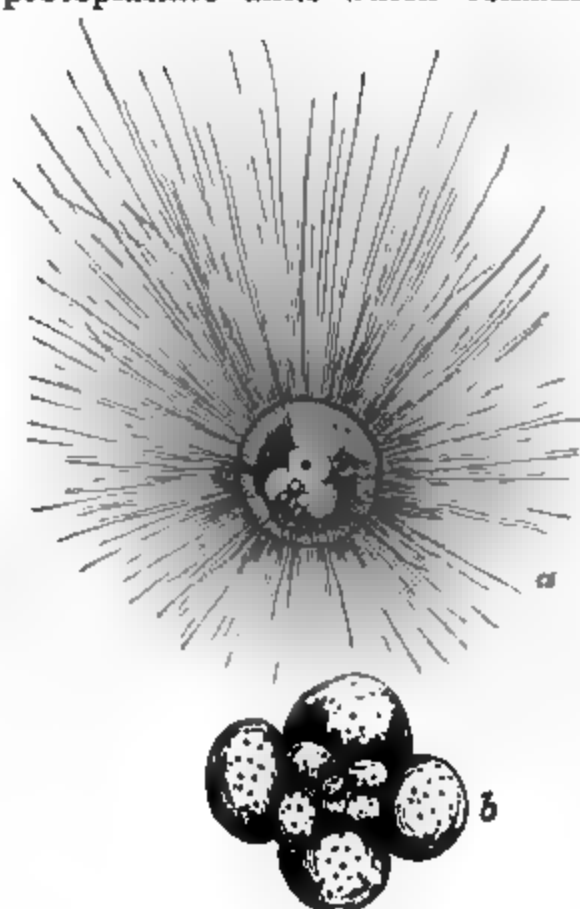


FIG. 3. FORAMINIFERA.

so far from being one plant, volvox is in reality a colony of the lowest members of the vegetable world. There are many other *Alge* (or lowest plants) which resemble volvox in their compound nature ; and thus the beginnings of plant-life appear to present us with a tendency towards colonisation similar to that which faces us on the threshold of the other series of living beings.

In the curious group of the sponges (fig. 5), we may find our next convenient halting-place in our researches into animal individuality

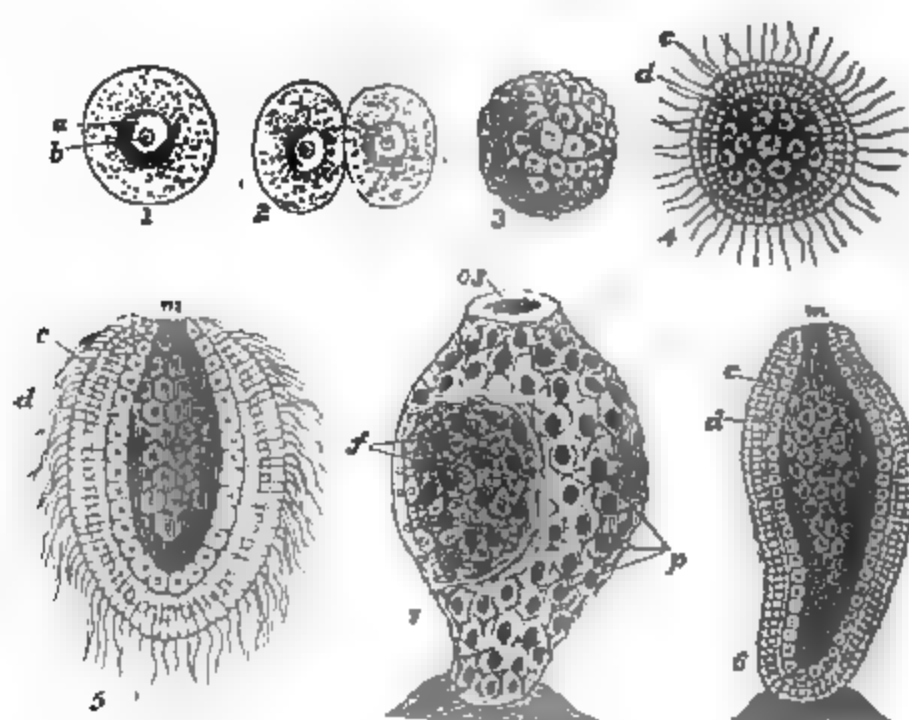


FIG. 5. SPONGE AND ITS DEVELOPMENT.

and its variations. From forming the *bête noire* of the naturalist of former years, who was troubled in his mind as to the animal or plant nature of the sponges, to occupying a singular and anomalous position in the animal classifications of to-day, this group of organisms has attained a well-merited celebrity. The living parts of a sponge—that is to say, the parts which form and make the sponge-framework, and which alone concern us in our present investigation

consist of masses of protoplasm, which are in their way strictly comparable to the minute bodies, or “cells,” of which our own tissues are built up. A sponge, as to its living parts, is a mass of protoplasmic cells, “some of which,” as Huxley puts it, “have all the characters of *Amœbe* ; while others are no less similar to monads” —these latter being microscopic masses of protoplasm, furnished, like *chlamydomonas*, with two waving cilia. The comparison of a sponge to a kind of “submarine Venice,” with its canals, along the banks of which the inhabitants (or masses of protoplasm) reside, and through which flow the water-currents bringing particles of nourish-

ment to these denizens, is therefore seen to be fully justifiable in one sense. Still more justifiable and appropriate would such a metaphor be, could we prove that the sponge was in reality what the simile indicates, namely, a colony of animals—seeing that the comparison of the sponge to the Adriatic capital derives its whole force from the assumption that its personality, like that of the city, is compound, and not that of the element or unit. As we shall hereafter see more plainly, the sponge must be judged, like every other living being, not by its appearance or by what it simulates, but by what it originated from. As an apparent collection of organisms, it might well be regarded as a veritable colony; on other grounds, the sponge might appear as rightfully entitled to be considered as single and undivided an animal unit as a man. The grounds on which these opinions are based need not now be specified, but the history of how a sponge grows, finds its appropriate place at this stage of our inquiry. The most typical sponges grow each from an egg (Fig. 5, 1), which passes through characteristic stages of development (2, 3, 4), and finally becomes a cup-shaped body (5), possessing a double wall (*c, d*), the cavity of the cup opening outwardly by a distinct mouth (*m*). Then pores or openings (7, *p*) are formed in the wall of this cup, placing its interior in a new fashion in communication with the outside world. The outer wall of the cup, and the inner wall likewise, consist of cells; and those of the inner wall finally come to possess cilia, which, by their constant motion, cause currents of water to flow into the inside of the cup through the pores, and outwards by its mouth.

The nourishment of a sponge is subserved by these water currents, bringing food and oxygen to its living cells; and the simple or cup-shaped sponges (Fig. 5, 7), of which many species are known, exhibit a history resembling that of which the outlines have just been sketched. The horny sponges, the skeletons of certain species of which we use in our domiciles, may and do develop into organisms of a more complex character than the cup-sponges present, and they may also originate otherwise than from eggs. The common green fresh-water *Spongilla*, found growing on the sides of canal locks and in similar situations, illustrates the latter form of development. This species propagates its kind by veritable buds, whilst it also produces eggs; and another curious fact, possessing a significant bearing on the individuality of the sponges, consists in the observation that when two *Spongillæ* are placed in contact they merge together into one. They may also be divided artificially, or may separate spontaneously into two or more organisms,

each of which will lead an independent existence. The sponges, then, may be hereafter referred to as a group of animals which, whilst originating from eggs, as do higher beings, yet retain much of that tendency to segregation and separation into distinct and elementary parts which we may reasonably maintain is a primitive and fundamental character of all living beings.

Nearly allied to the sponges are the little freshwater polypes named *Hydræ* (Fig. 6), and the marine plant-like organisms familiarly

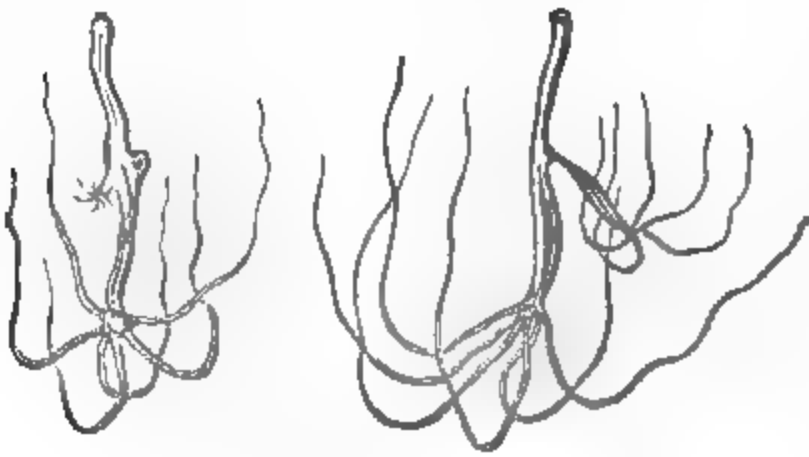


FIG. 6. HYDRÆ.

known as "Zoo-phytes" (Fig. 7). Here we at once enter the domain of animal "colonies," and find intensified and illustrated in the plainest fashion those tendencies towards division and segregation of body which, at the best, are but dimly marked in lower organisms. The hydra, existing as a little green tubular body—attached by one extremity to a water weed, and exhibiting at the free end a mouth and tentacles—at certain seasons exhibits a growth of small projections on its sides. As these projections increase in size, they grow

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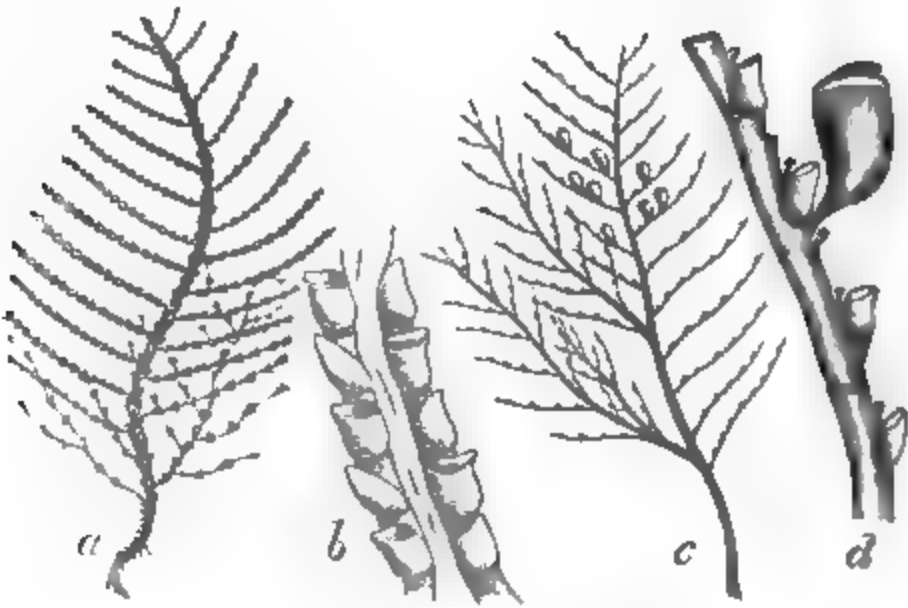


FIG. 7. ZOOEPHYTES. *b* and *d*, magnified portions of *a* and *c* respectively.

into the likeness of young hydræ (Fig. 6), each developing a mouth and tentacles, and possessing, so long as they adhere to the parent body, free communication with the interior of the latter. These budded

hydræ may in their turn produce buds, and a veritable genealogical tree may thus be viewed, in that three generations of polypes remain connected as they were produced by the parent stem. The hydra thus converts itself normally into a compound colony through this process of budding. But this state of matters is, at the most, transitory and temporary in hydra-existence. The budded individuals, sooner or later, break contact with the parent-body, and pass to seek a lodgment and to begin life on their own account; leaving the parent, single as before, but connected, as we shall presently note, to the free offspring by ties which our transcendental philosophy makes clear and plain. It may lastly be remarked that, in respect of structural constitution, the closest similarity exists between a cup-sponge and a hydra. Both possess tubular bodies, and both consist of two cellular layers. Modern zoology has emphasised this likeness by placing the sponges in the same great group (*Cœlenterata*) which contains the hydra and zoophytes. It is conceivable enough, indeed, that a hydra is simply a specialised sponge-form possessing its compound and colonial nature somewhat disguised beneath an apparently single personality.

The constitution of a "zoophyte" (Fig. 7) is mere matter of repetition after the recital of the hydra's peculiarities. The plant-like sertularian or "sea-fir" (Fig. 7, *a*), which we dredge by the hundred, growing on oyster-shells; or the flustra (Fig. 8) or "sea-mat"—of higher organisation than the "sea-firs," but presenting likewise the aspect of a marine plant—

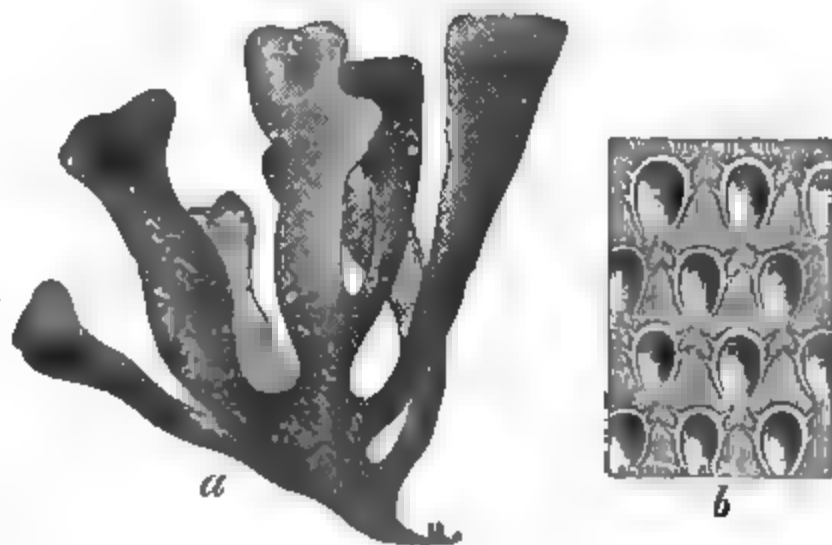


FIG. 8. FLUSTRA, OR SEA-MAT. *a*, natural size; *b*, magnified, showing the cells.

present us each with a veritable colony of more or less similar beings, united in the bonds of close relationship. Thus the sea fir, as the type of the true zoophyte, bears on its branches hundreds of little cups (Fig. 7, *b*, *d*), each of which contains an animal strictly corresponding in structure to a hydra (Fig. 6). This multitude of animal bodies is bound together in intimate union. The stem and branches are hollow, and each little mouth and body, digesting the food its tentacles have captured, transmits that food to swell the general

stream of nutriment circulating through the tree-like fabric. Thus we find the principle of co-operation herein illustrated in plainest guise. Each little animal derives its own share of nutriment from the general store it has helped to manufacture ; and the exercise of the principle in question is all the more perfect, in that its practice is free from those petty jealousies and personal inducements to infringe the duty of equal and harmonious work which usually beset the co-operative societies of higher existence. The remaining points which call for notice in the history of the zoophyte may be shortly summed up. The little members of the colony are continually dying off as the result of their life-work, but their place is supplied and the colonial loss repaired by the production of new buds. As leaves fall from a tree and are replaced by the growth of new buds, so the zoophyte-units wither, fall, and in like fashion are represented anew in the constitution of the organism. Then, lastly, the origin of the zoophyte in an egg is worthy of note. Each zoophyte originally springs from an egg, which, passing through the changes common to the early development of all ova, produces an embryo which finally settles down and attaches itself.

This first embryo next assumes the likeness of a single little hydra-like unit of the zoophyte colony. Then the process of budding commences. Bud after bud is produced, each growing into the likeness of the primary one, and all adhering together as parts of a connected organism, until we find reproduced before our eyes the tree-like form with which our research began. Thus a hydra and a zoophyte are very nearly allied ; the chief difference between these organisms consisting in the fact that, whilst the buds remain permanently connected together in the latter, they are intended to seek an independent existence in the former. True, there are buds produced by the zoophyte which in many cases detach themselves and swim freely in the sea under the guise of "jelly-fishes," and which mature, apart from the zoophyte, the eggs from which new generations of these plant-like animals will spring. But these floating jelly-fishes, despite their freedom, are in reality buds of the zoophyte. They are connected by all the ties of blood-relationship with their plant-like parent, and are essential parts of the zoophyte colony even when separated from the parent-organisms by many leagues of sea.

In all zoophytes the component units of the colony belong to one type. Whatever their function, they are modelled on the type of the hydra, and on that of the ordinary nutritive members of these animal trees. Even the jelly-fish buds just mentioned, are but modifications of the hydra-type ; and that these and other reproductive bodies

are likewise modifications of the hydra-type is proved by the fact that, when their generative functions have been discharged, they may revert to the form of the nutritive members of the colony. We know, lastly, of cases in which a zoophyte-colony may number no fewer than seven apparently different kinds of members, these units, notwithstanding the diverse functions they perform, exhibiting a fundamental agreement in type and structure. There is seen, therefore, a close parallelism between the repetition and modification of parts in the colonial zoophytes, and the vegetative repetition of the leaves and buds of the tree.

The Flustras, or "Sea-mats" (Fig. 8), illustrate a slightly different phase of colonial relationship in animals from that presented by the zoophytes. We have seen that each member of the zoophyte colony exists in intimate structural relationship and connection with every other unit of the compound organism. But in the "Sea-mats"—each of which presents us with the appearance of a piece of pale brown seaweed, bearing on either side its hundreds of little cells (Fig. 8, *b*), each containing a little tenant—the individual animals of the colony do not communicate with each other. On the contrary, each member of the sea-mat colony is perfectly distinct from all its neighbours, and lives enclosed in its separate domicile. But for the union of its cell-wall with the walls of other cells, each little sea-mat unit is a thoroughly independent being ; and even the so-called "colonial nervous system," which was long believed to connect the members of the fraternity in a common bond of sensitiveness, has been proved to be non-existent. It is highly interesting, therefore, to find that compound animals may, like the zoophytes, possess their individual or component units in close structural harmony and relationship ; or may, on the other hand, like the sea-mats, exhibit a collection of animals each of which is thoroughly independent of its neighbours. That such differences have not originated in any haphazard fashion, but that they are a veritable result of the tendencies of development, is readily enough proved. For, whilst each member of the zoophyte-stock is in free and full nutritive co-operation with its neighbours, each "sea-mat" unit preserves within its own cell, not merely a perfect digestive apparatus, but a nervous system, and reproductive or egg-producing organs as well. The independence of the "sea-mat's" members has been accompanied by the development of a much higher organisation than is found in the interdependent zoophyte-units ; although, of course, such a statement of fact still leaves the origin and cause of the independence of the higher "sea-mat" units an open question. But in its manner of growth the latter colony

resembles the zoophyte. Each unit has the power of adding to the colony by the process of budding already described; whilst each member of the colony possesses, likewise, the power of giving origin to eggs. Each egg, undergoing its full development, produces first one primitive unit, and thereafter and from this unit develops, by budding, a whole colony, with its hundreds of component and similar beings.

There exist in the ranks of that curious class of beings, the internal parasites, certain interesting examples of the compound animal form. A tapeworm (Fig. 9), for instance, inhabiting the digestive tract of some warm-blooded quadrupeds, and attaining a length, it may be, of many yards, consists of a very minute head (Fig. 9, 1), a slender neck, and many hundreds of so-called "joints."

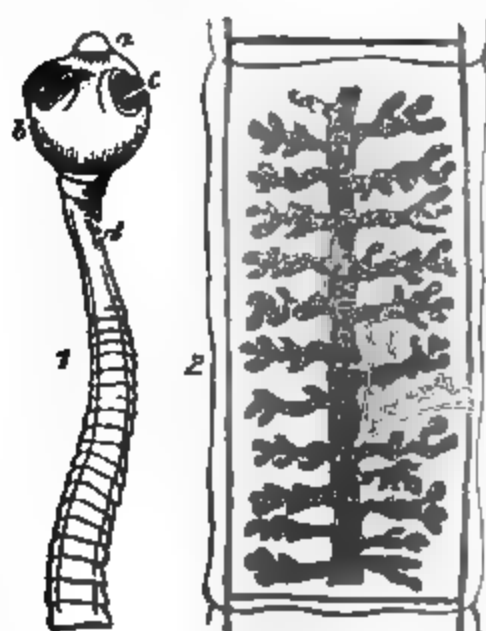


FIG. 9. TAPEWORM.
1. Head, suckers, neck, and joints;
2. A single joint (magnified).

At first sight, these "joints" might be regarded as resembling in their nature those of the ordinary worms, and as therefore possessing no distinct individuality on their own account, separate from that of the organism of which they form part. But the examination of the joint of a tapeworm (Fig. 9, 2) shows us that in reality it preserves a separate and apparent individuality of its own. In other words, it is not merely a part of one animal in the sense that the joint of a backbone is part of a fish or bird. It corresponds, on the contrary, with a member of the zoophyte or "sea-mat" colony in that it represents a highly specialised and individualised unit of an organism, that organism being of compound nature. Each "joint" of the tapeworm contains a complete set of egg-producing organs (*o*), and presents other indications of its semi independent character and constitution. Connected to its neighbouring joints by water-vessels as well as by the nerve-cords, the joint is in intimate union with the other units of the colony. But it is, nevertheless, a distinct unit after all, and the tapeworm is not a single animal, but, like the sea-mat and zoophyte, a "colonial organism."

Amongst other and true "worms," however, we find curious instances of development, which, in our consideration of the origin of the conditions we are studying, may serve to elicit some

valuable hints concerning the causation of colonies at large. The little river-worms known as the Naïdides (Fig. 10), occasionally exemplify certain peculiar modes of reproduction which deserve careful study. A naïs may be seen to exhibit a slight constriction towards the posterior part of its body. As this constriction deepens, a new head, eyes, and tentacles are seen to be formed at the spot in question (Fig. 10), and a new naïs is thus viewed budding from the hinder extremity of the original individual. This new being, produced thus by the division of the parent body, sooner or later becomes detached therefrom, and seeks an independent existence. Cases have been observed in which as many as six new individuals have been produced from a single naïs. In *Cirrhatula*, another worm-genus, Müller relates that he found three new individuals adherent "in one length." "The mother," he remarks, "had thirty pedate segments; the youngest daughter, or that nearest the mother, had eleven, but the head was not yet developed. The most remote had seventeen rings, with both head and eyes, and, moreover, the tail of the mother; the middle one had seventeen segments and a head." It is matter for remark that no egg-producing organs exist in the new individuals thus budded, which may therefore be named neuters. The last-formed individual, however, developes reproductive organs, and thus the continuance of the species in time is duly provided for.

In connection with the production of like parts by budding—a process known as that of "vegetative repetition" of parts, and producing what is known as the "serial homology" of animals—it is interesting to note that the twenty joints or so of which an animal like the lobster (Fig. 11) is composed, are constructed, irrespective of size or function, upon one and the same type. The same remark holds good of an insect, of a centipede, of a spider, or other articulated animal. Very striking is it to find that a lobster's "feelers" really correspond in nature with its legs; that its eye-stalks agree with part of the appendages of its tail-joints, and that its jaws are simply the feet of the head modified for chewing. These varied organs arise from a common type, just

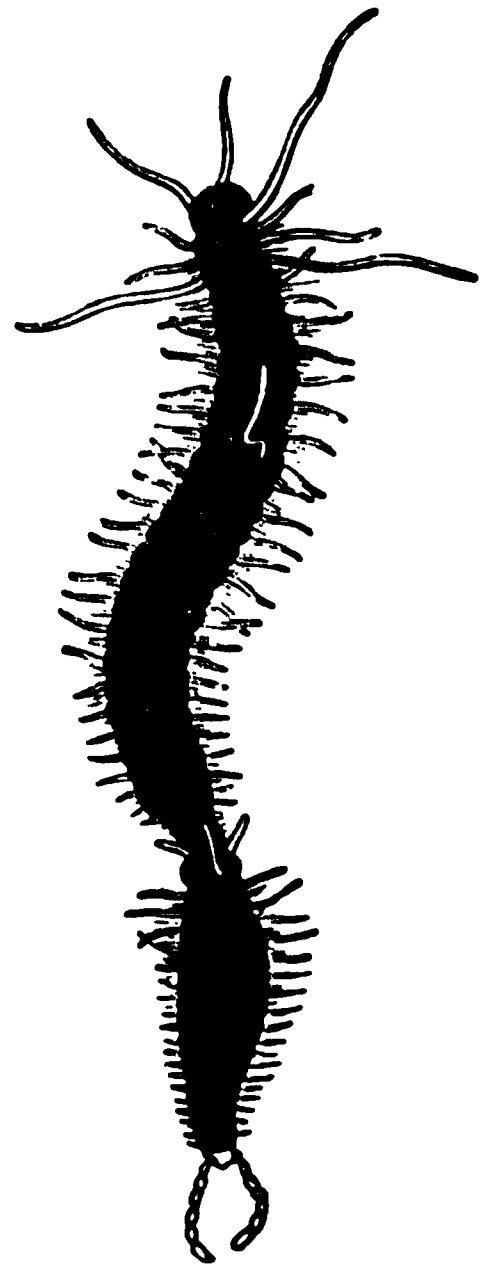


FIG. 10. NAÏS, OR FRESH-WATER WORM.

as the joints which bear them exhibit a singular uniformity of structure. Hence a lobster, or other articulate animal, gains the best

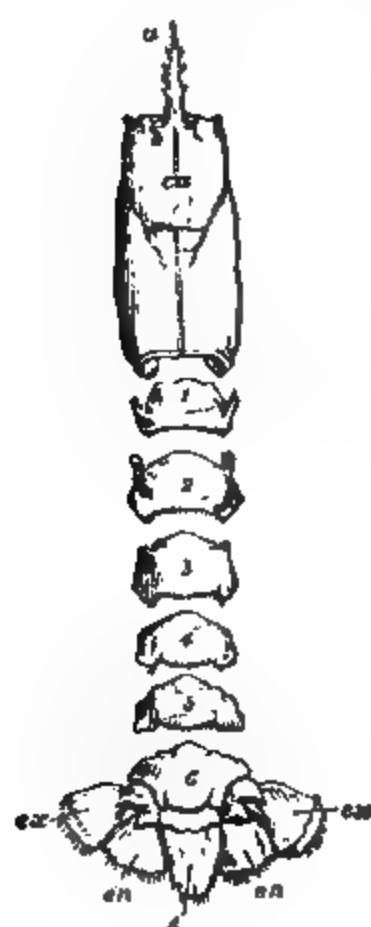


FIG. 11. LOBSTER.

possible title to be named colonial, in that it is not merely composed of visible "units," but also in that these units are modifications of a common and single plan. In connection with the curious phases of worm-growth observed in the Naïdides (fig. 10), we may note that the individuals of the centipede-class increase in size and add new segments to their bodies in a somewhat similar fashion. When a young centipede or gally-worm (*Julus*) (Fig. 12) is attaining its full growth, new joints are seen to bud out between the last segment but one (C, *f*; D, *n s*) and the joints in front thereof; so that the last-formed joints (E, 9-14) in a young centipede are placed towards its tail-extremity. If we could imagine that some of these last-formed segments developed a head, and separated themselves from the parent-frame as a new being, we should possess an exact imitation of the process whereby the young Nais (Fig. 10) originates from its parent-form.

An interesting biological speculation has arisen in connection with the personality of those familiar animals the Starfishes (Fig. 13).

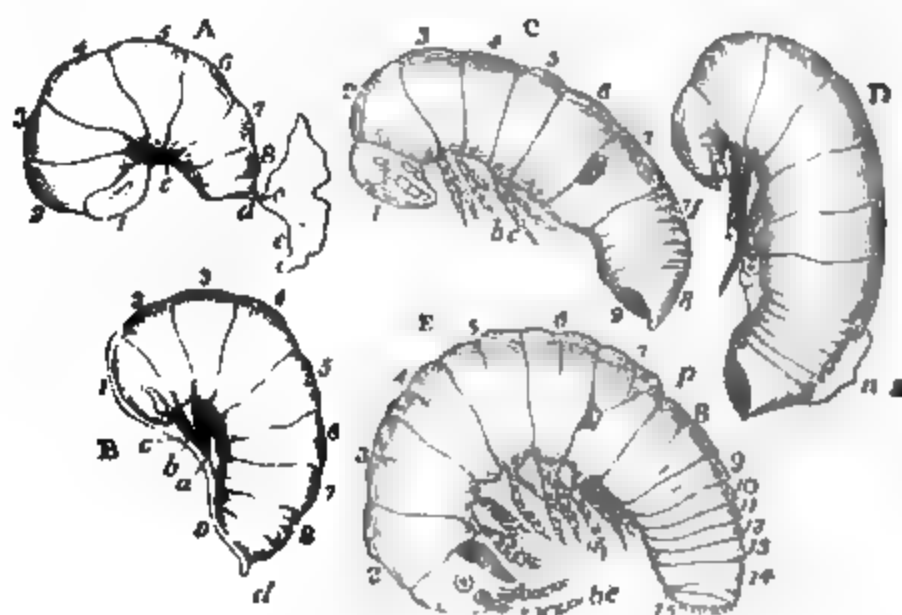


FIG. 12. DEVELOPMENT OF JULUS.

Here we find a central body or disc (Fig. 13, *a*), with, in the common species, five rays or arms, containing each an exactly similar arrange-

ment of the organs of the body, diverging therefrom. Haeckel's ingenious speculation that "each arm of the starfish essentially corresponds in its organisation with an articulated worm," is objected to by some naturalists, and amongst others by Huxley, who agrees that the starfish, or echinus, may have arisen from a worm-stock, but argues that both the starfish and sea-urchins owe to secondary modification their characteristic form. Haeckel, however, is supported by authority so eminent as Gegenbaur, who remarks, that "there is a certain amount of independent organisation in each arm of a starfish ; its organs . . . have exactly the same position as the homologous organs of an Annulate worm. If, then, we compare each of the budding arms with a worm-like organism, we must regard the starfish developed by this process of gemmation as corresponding to a multiple of such organisms ; and, further, we must recognise in this phenomenon the same process of gemmation (or budding) as that which takes place in other lower animals ; for example, in the compound ascidians (or sea-squirts). It is a process," says Gegenbaur, "in which several separate animals are simultaneously budded off ; the process does not go on till these animals are completely separated, but stops in such a way as to keep them connected together as an individual of a higher order." We know, as just remarked, of allied cases amongst the sea-squirts, where several beings are budded in star-shaped fashion (*Botryllus*) to form a colony. And when we reflect that, as every sea-beach shows, a starfish may be deprived of all its arms, and as one arm (Fig. 13, 3) may not merely live an independent existence, but will in time reproduce the other four, Haeckel's idea that a star-fish is really a collection of worm-like beings, is seen to be so far supported by comparative anatomy and by the analogies of development as well.

The list of animal classes in which a colonial constitution is developed may appropriately enough be concluded with the brief recital of the process whereby the *Aphides*, or plant-lice (Fig. 14),

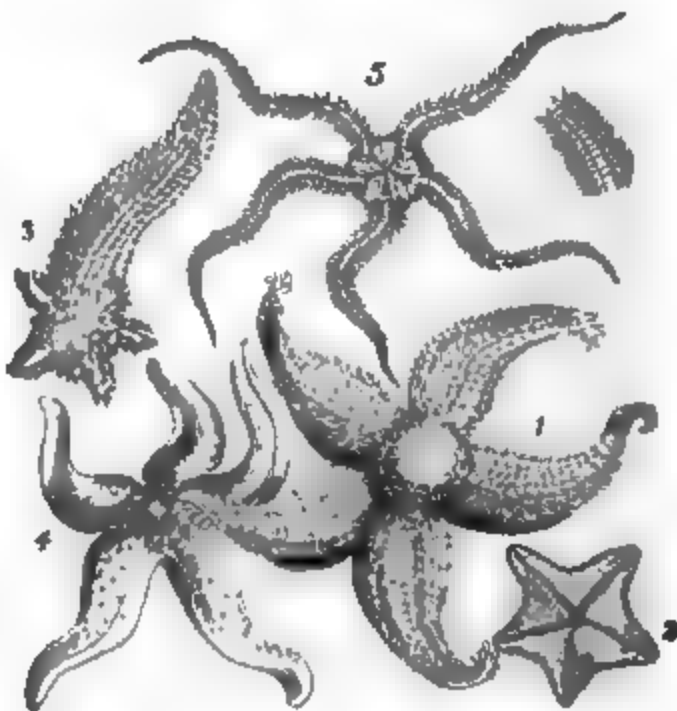


FIG. 13. STARFISHES.

which devastate our plants, and the bees themselves, propagate their race—the latter forming social colonies which in their essential nature may be deemed analogous to the zoophyte-stocks of lower

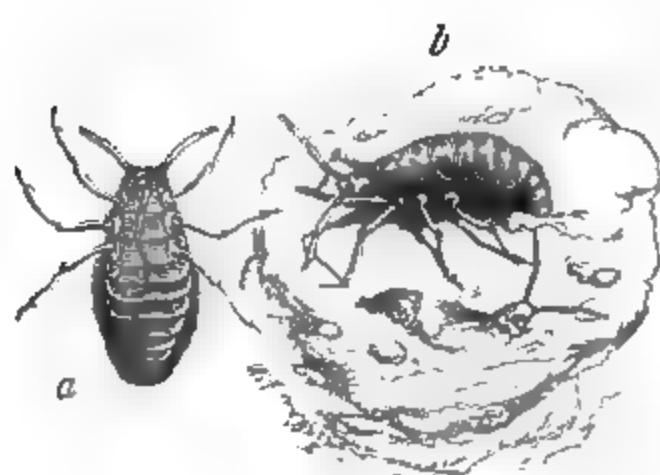


FIG. 14. PLANT LICE
a, wingless insect. b, wingless insect.

life. The single and undivided personality of a bee or an aphid would at first sight seem to admit of no question. Each presents itself to view as an active being, possessing no structural connections with neighbour-organisms, and evincing all the apparent marks and characters of an ordinary "individual." But our philosophy relies, as

already remarked, more on what an organism has arisen from than upon what its apparent constitution may be. Hence the consideration of a bee's origin involves the answer to the question of its true nature. In the reproduction of the bee race, certain of the eggs are impregnated or fertilised, whilst others are allowed to develop without the performance of this process—rightly deemed of essential nature to the propagation of both animals and plants. Now, those eggs of a queen-bee which she lays in an unfertilised condition, invariably develop into drones, or male bees, whilst the fertilised eggs become females, or queens, or neuters—the latter being merely imperfect females, on whom devolves the whole work of the hive. In the plant-lice, the eggs normally produced by both sexes in the autumn lie dormant all the winter, and then give rise to wingless female aphides alone. These latter produce, in viviparous fashion, a winged or wingless progeny, which in turn repeat the fertility of their parents. As Huxley remarks: "The number of successive viviparous broods thus produced has no certain limit, but, so far as our present knowledge goes, is controlled only by temperature and the supply of food. *Aphides* kept in a warm room, and well supplied with nourishment, have continued to propagate viviparously for four years."

Now, close research has disclosed other cases of this apparent violation of the ordinary rules of reproduction in the animal world. We know that in certain saw-flies, some of the female insects will, of themselves, lay unfertilised eggs, which develop into male saw flies. In some insects (*Chermes*; *Coccus*) no males have been discovered. There are also certain caterpillar-like females among the butterflies

1 moths (e.g. *Psyche* and *Solenobia*) which lay unfertilised eggs giving origin to female insects like themselves, whilst from fertilised eggs the two sexes are developed in nearly equal numbers. It may be conceded that in the case of the bees, as insects of specialised type, we are dealing with insects in which true unfertilised eggs develop into drone-insects. But in the lower plant-lice, the process is more nearly related to the budding of the zoophyte. Each aphid, produced viviparously from the parent-body, grows from a structure which, whilst

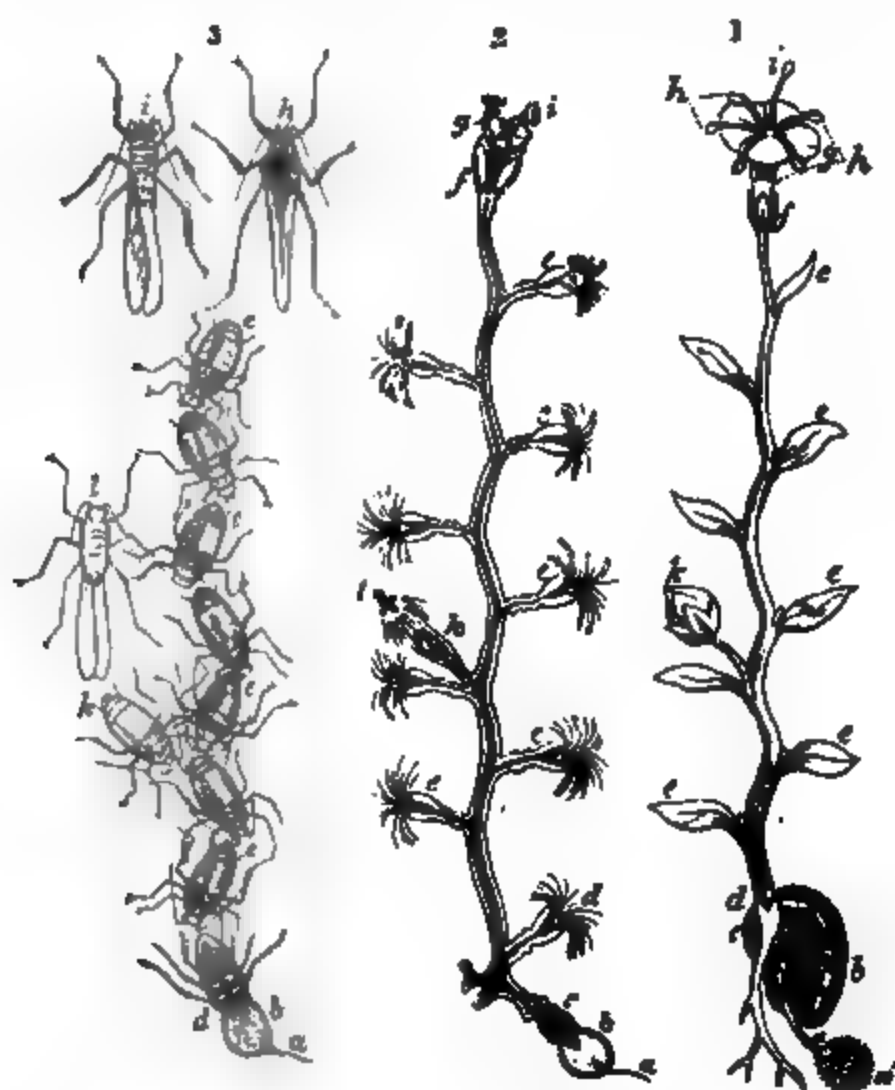


FIG. 15. COMPARISON OF DEVELOPMENT in (1) a Flowering Plant; (2) a Zoophyte; and (3) a Colony of Plant-Lice (*Aphides*).

it resembles a true egg, does not pass through the development of that body, and is therefore called a *pseud-ovum*. Gradually this pseud-ovum grows into the likeness of the aphid, which after birth will develop within itself like bodies, and thus carry on the work of continuing the species in time. If we suppose that the aphides remained connected together (Fig. 15, 3), instead of preserving a distinct structural identity, we should reproduce in this insect-tribe an exact *fac-simile* of the zoophyte-colony (Fig. 15, 2), with its budded branches (*e*) and its ever-increasing wealth of members. For plant-lice reproduc-

tion is in reality a process of budding, and the colonial constitution of the insects is really veiled and masked by their freedom from the parent-stock. They may, in truth, be compared to those free-swimming "jelly-fish" buds which the zoophyte developes upon and liberates from its branches, but which remain, nevertheless, in the gaze of philosophy, essential parts and constituent units of the animal-tree which gave them birth. Lastly, let us bear in mind that the egg itself is merely a reproductive bud ; and that there are gradations thus to be witnessed leading from the true egg, with its normal development, after fertilisation, to the pseud-ovum with its bud-like career, and finally to the bud itself, which, as we shall see, never attains, let its development be what it may, to the rank of a true individual animal. A glance at Fig. 15 will serve to show the correspondence between the development of aphides (3), zoophyte (2), and plant (1). In each case, the bulk of the compound organism is provided for by a process of "budding ;" whilst, as the colony reaches its higher development, the production of new and independent individuals, through eggs and seeds respectively, is witnessed.

ANDREW WILSON.

(To be concluded.)

CHARLES LAMB'S HUMOUR.

THE very bitter and sarcastic references to Charles Lamb in the posthumous "Reminiscences" of Carlyle suggest a problem with two sides. The one relates to the quality of Lamb's humour; the other to the limits of Carlyle's insight, and the possibility of his judgment being swayed by considerations *purely personal*. One of the greatest faults that can be found with a writer who deals in any form with topics that closely touch social or critical questions, is the tendency to submerge all general canons of criticism under a merely personal bias. From nothing more than from this cause are the springs of impartial and efficient criticism likely to be disturbed and corrupted. The reverence which should be reserved for that serene and gracious self-denial which, in face of all temptation, will persist in looking straight at the subject and reporting upon it, and it alone, is perverted and bestowed on forcible self-expression and diseased egotism. That this was almost invariably the case with Carlyle is a point which we think could be demonstrated by ample array of instances and illustrations from his works; but this were far too wide a subject for our present limits, and we must content ourselves with asserting here that these "Reminiscences," where Carlyle was writing with perfect freedom and with no thought of outside criticism, completely establish the fact. Mr. Froude's indiscretion in publishing the work pretty much as it stood has two things—and we think only two—to be said in its favour:

1. That we get here a glass through which we can look back at all Carlyle's writings, and see that his very strength lay in his narrowness—in the quaint and intense play of his own personality over everything with which he dealt, a personality which, in trying to veil itself with a view to effect, originated his humour, and yet constrained and weakened it, in robbing it of all expansiveness and geniality. It has been rather neatly said:—

"If Carlyle is admitted to have power as a 'teacher,' then in the very measure of that power is he declared to be deficient in the creative spirit. Shelley said that 'the secret of morals is love, or a going out of self.' Mr. Carlyle, notwithstanding his great *show* of

dramatic positions, never really goes out of self, though he shows amazing power of carrying the atmosphere of his quaint and intensely narrow individuality into spheres wholly foreign to it ; and hence arises the peculiarly grotesque humour which we so often find in him. It is by means of his sharply individual and sometimes even morbid conceptions that he teaches formal lessons ; and when such an one does this, he shows himself only a higher pedant, and no artist.

“This attempted infusion of his intense personality beyond the line that must ever divide mere autobiography from dramatic writing—the line, in short, where true creation begins—is what nearly ruins Mr. Carlyle’s books as works of art, ingenious and quaintly original though they be. Behind all the wavering images he conjures up, the man himself is seen to manœuvre and sneer or simper ; and the echo of his sharp voice, as it dies away in the distance, dins in our ears, and confuses the words of his characters. His humour is of the compulsive and hard-driving kind which humour should not be, and can hardly be and maintain its essential characteristics.”

Carlyle’s humour is, then, to use a paradox, *un*genial ; and it would seem that he has not the power to appreciate what is truly *genial* in humour. Goethe’s sub-acid and cynical by-play put into the mouth of Mephistopheles pleases him better than the more humane humour of Sir Walter Scott’s Nicol Jarvie or Dandie Dinmont ; and he is bold to assert that Charles Lamb had no humour at all.

2. It is an advantage that such outbursts should have been published, while as yet the facts in regard to others and to Carlyle’s relations to them are fresh in the memories of many, and that thus his assertions can be in so far met and repudiated. With respect to Lamb, however, the process is a literary rather than a biographical one ; the proofs of Carlyle’s injustice and incapacity here depend less on facts than on general impressions. If we show that Charles Lamb himself had, under the veil of true and genial humour, made pathetic confession of all the weaknesses now so cruelly and sardonically charged against him, and in such a manner as to disarm the attack or the reproach of the severest moralist ; and if, besides, we find that excuses have been pled in mitigation, if not in justification, of certain indulgences—it should surely suffice to attest the fact of an utter lack of genial and comprehensive sympathy on Carlyle’s part ; and, in restoring Lamb to his true and rightful place as a fine and gentle humorist, demonstrate Carlyle’s inevitable incapacity of judgment, and his grim, black-browed injustice toward a whole class of natures at the antipodes from his own. This is our aim, and we believe we shall succeed in realising it.

As in the case of all true humorists of the more erratic and sentimental class (and Charles Lamb's was essentially erratic and sentimental, notwithstanding an effort to hide his sentiments sometimes, and to seem self-contained and, in the more innocent sense, *worldly*), the Essays of *Elia* are essentially self-revelations. Between the lines we can read the main points of a biography. De Quincey, it will be remembered, jested about the unimportance of the ordinary facts of biography, because, as he said, it was inevitable that a man should have been born; that he should, if too lucky not to have been hanged, have still deserved hanging; or that, having escaped the halter, he should have died in bed. These facts, or such facts as these, will not be specifically communicated in set phrase by your erratic and sentimental humorist, nor are they of importance in view of a general estimate. That Charles Lamb had, as Carlyle says, an "insuperable proclivity to gin" is of less importance than the mental conditions which predisposed to it, and rendered it, as we may say, the almost inevitable accompaniment of his genius, which a true heart would excuse and shroud in reverent silence. Carlyle has grimly spoken of the insanity which haunted the Lambs; it would have been well for his memory if he had spared these words, since Lamb himself, in his half-veiled yet frank "Confessions of a Drunkard," has not ventured plainly to speak of it. That was not because he would have willingly hidden any predisposing cause, but because the tragedy of the suggestion would have broken in on the pathetically-humorous appeal for the sake of which the essay was written. There was a deep in the region of causes which even his playful humour would not justify him in indicating.

Oh pause, thou sturdy moralist, thou person of stout nerves and a strong head, whose liver is happily untouched, and ere thy gorge rise:th at the *name* which I have written, first learn what the *thing* is; how much of compassion, how much of human allowance, thou mayest virtuously mingle with thy disapprobation. Trample not on the ruins of a man. Exact not, under so terrible a penalty as infamy, a resuscitation from a state of death almost as real as that from which Lazarus rose not but by miracle.

Begin a reformation, and custom will make it easy. But what if the beginning be dreadful, the first steps not like climbing a mountain but going through fire? What if the whole system must undergo a change, violent as that which we conceive of the mutation of form in some insects? What if a process comparable to flaying alive have to be gone through? Is the weakness that sinks under such struggles to be confounded with the pertinacity which clings to other vices, which have induced no constitutional necessity, no engagement of the whole victim, body and soul?

I have known one in that state, when he has tried to abstain but for one evening—though the poisonous potion had long ceased to bring back its first enchantments, though he was sure it would rather deepen his gloom than brighten

it—in the violence of the struggle, and the necessity he had felt of getting rid of the present sensation, at any rate,—I have known him to scream out, to cry aloud, for the anguish and pain of the strife within him.

Why should I hesitate to declare that the man of whom I speak is myself? I have no puling apology to make to mankind. I see them all in one way or another deviating from the pure reason. It is to my own nature alone I am accountable for the woe I have brought upon it.

I believe that there are constitutions, robust heads and iron insides, whom scarce any excesses can hurt; whom brandy (I have seen them drink it like wine), at all events whom wine, taken in ever so plentiful a measure, can do no worse injury to than just to muddle their faculties, perhaps never very pellucid. On them this discourse is wasted. They would but laugh at a weak brother who, trying his strength with them and coming off foiled from the contest, would fain persuade them that such agonistic exercises are dangerous. It is to a very different description of persons I speak. It is to the weak—the nervous; to those who feel the want of some artificial aid to raise their spirits in society to what is no more than the ordinary pitch of all around them without it. This is the secret of our drinking. Such must fly the convivial board in the first instance, if they do not mean to sell themselves for a term of life.

The vein of quaint self-analysis and self-portraiture which runs through all the Essays of Elia, imparting a kind of whimsical unity in spite of the variety and vagary of moods and even of opinions, forms the most attractive element. And how uniformly faithful and comprehensive are his judgments on himself, though half disguised under affected playfulness!

My late friend (he says, writing of Elia) was in many respects a singular character. Those who did not like him, hated him; and some, who once liked him, afterwards became his bitterest haters. The truth is, he gave himself too little concern what he uttered, and in whose presence. He observed neither time nor place, and would e'en out with what came uppermost. With the severe religionist he would pass for a free-thinker; while the other faction set him down for a bigot, or persuaded themselves that he belied his sentiments. Few understood him; and I am not certain that at all times he quite understood himself. He too much affected that dangerous figure—irony. He sowed doubtful speeches, and reaped plain unequivocal hatred. He would interrupt the gravest discussion with some light jest; and yet, perhaps, not quite irrelevant in ears that could understand it. Your long and much talkers hated him. The informal habit of his mind, joined to an inveterate impediment of speech, forbade him to be an orator; and he seemed determined that no one else should play that part when he was present. I have seen him sometimes in what is called good company, but where he has been a stranger, sit silent, and be suspected for an odd-fellow; till some unlucky occasion provoking it, he would stutter out some senseless pun (not altogether senseless, perhaps, if rightly taken), which has stamped his character for the evening. It was hit or miss with him; but nine times out of ten he contrived by this device to send away a whole company his enemies. His conceptions rose kindlier than his utterance, and his happiest *improvisus* had the appearance of effort. He has been accused of trying to be witty, when in truth he was but struggling to give his poor thoughts articulation. He chose his companions for some individuality of character which they manifested. Hence,

not many persons of science, and few professed *literati*, were of his councils. They were, for the most part, persons of uncertain fortune; and, as to such people commonly nothing is more obnoxious than a gentleman of settled (though moderate) income, he passed with most of them for a miser. To my knowledge this was a mistake. His *intimados*, to confess a truth, were in the world's eye a ragged regiment. He found them floating on the surface of society; and the colour, or something else, in the weed pleased him—the burrs stuck to him—but they were good and loving burrs for all that. He never greatly cared for the society of what are called good people. If any of these were scandalised (and offences were sure to arise), he could not help it. When he has been remonstrated with for not making more concessions to the feelings of good people, he would retort by asking, What one point did these good people ever concede to him?

So that poor Lamb was quite conscious of his weakness in the way of offending people by his inveterate habit of jesting and punning. And yet, he pleads that he could not help it. We easily see how, when Carlyle was preaching and moralising over the fowls, he would come out with, “P-p-perhaps you are a p-p-poulterer!” Something of the same vein of quaint self-analysis we find in another essay:—

In a degree beneath manhood, it is my infirmity to look back upon those early days. Do I advance a paradox when I say, that, skipping over the intervention of forty years, a man may have leave to love *himself*, without the imputation of self-love?

If I know aught of myself, no one whose mind is introspective—and mine is painfully so—can have a less respect for his present identity than I have for the man Elia. I know him to be light, and vain, and humorsome; a notorious addicted to averse from counsel, neither taking it, nor offering it besides, a stammering buffoon; what you will; lay it on and spare not; I subscribe to it all, and much more than thou canst be willing to lay at his door—but for the child Elia—that “other one,” there in the background—I must take leave to cherish the remembrance of that young master with as little reference, I protest, to his stupid changeling of five-and-forty, as if it had been a child of some other house, and not of my parents. I can cry over its patient small-pox at five, and rougher medicaments. I can lay its poor fevered head upon the sick pillow at Christ's, and wake with it in surprise at the gentle portion of maternal tenderness hanging over it, that unknown had watched its sleep. I know how it shrank from any the least colour of falsehood. God help thee, Elia, how thou art changed! Thou art sophisticated. I know how honest, how courageous (for a weakling) it was—how religious, how imaginative, how hopeful! From what have I not fallen, if the child I remember was indeed myself, and not some dissembling guardian, presenting a false identity, to give the rule to my unpractised steps, and regulate the tone of my moral being.

Yet once more we have his confession with respect to the type to which he would doubtless have held Mr. Carlyle to belong:—

I would not be domesticated all my days with a person of very superior capacity to my own—not, if I know myself at all, from any considerations of jealousy or self-comparison, for the occasional communion with such minds has constituted the fortune and felicity of my life—but the habit of too constant inter-

course with spirits above you, instead of raising you up, keeps you down. Too frequent doses of original thinking from others restrain what lesser portion of that faculty you may possess of your own. You get entangled in another man's mind, even as you lose yourself in another man's grounds. You are walking with a tall varlet, whose strides out-pace yours to lassitude. The constant operation of such potent agency would reduce me, I am convinced, to imbecility. You may derive thoughts from others; your way of thinking, the mould in which your thoughts are cast, must be your own. Intellect may be imparted, but not each man's intellectual frame.

As little as I should wish to be always thus dragged upward, as little (or rather still less) is it desirable to be stunted downwards by your associates. The trumpet does not more stun you by its loudness than a whisper teases you by its provoking inaudibility.

In view of the personal dislike Carlyle formed for Lamb, it may be interesting to read Lamb's eccentric confession of incapacity to love Scotchmen, though too definite conclusions as to actual habit and experience should not be drawn from a playful, erratic, and humorous exercise of the kind.

I have been trying all my life to like Scotchmen, and am obliged to desist from the experiment in despair. They cannot like me,—and in truth, I never knew one of that nation who attempted to do it. There is something more plain and ingenuous in their mode of proceeding. We know one another at first sight. There is an order of imperfect intellects (under which mine must be content to rank), which in its constitution is essentially anti-Caledonian. The owners of the sort of faculties I allude to have minds rather suggestive than comprehensive. They have no pretences to much clearness or precision in their ideas, or in their manner of expressing them. Their intellectual wardrobe (to confess fairly) has few whole pieces in it. They are content with fragments and scattered pieces of truth. She presents no full front to them—a feature or side-face at the most. Hints and glimpses, germs and crude essays at a system, is the utmost they pretend to. They beat up a little game peradventure—and leave it to knottier heads, more robust constitutions, to run it down. The light that lights them is not steady and polar, but mutable and shifting; waxing, and again waning. Their conversation is accordingly. They will throw out a random word in or out of season, and be content to let it pass for what it was worth. They cannot speak always as if they were upon their oath—but must be understood, speaking or writing, with some abatement. They seldom wait to mature a proposition, but e'en bring it to market in the green ear. They delight to impart their defective discoveries as they arise, without waiting for their development. They are no systematizers, and would but err more by attempting it. Their minds, as I said before, are suggestive merely. The brain of a true Caledonian (if I am not mistaken) is constituted upon quite a different plan. His Minerva is born in panoply. You are never admitted to see his ideas in their growth—if, indeed, they do grow, and are not rather put together upon principles of clock-work. You never catch his mind in an undress. He never hints or suggests anything, but unlades his stock of ideas in perfect order and completeness. He brings his total wealth into company, and gravely unpacks it. His riches are always about him. He never stoops to catch a glittering something in your presence to share it with you, before he quite knows whether it be true touch or not. You cannot cry *hah!* to

anything that he finds. He does not find, but bring. You never witness his first apprehension of a thing. His understanding is always at its meridian. You never see the first suspicion. Surmises, guesses, misgivings, half-intuitions, semi-consciousness, partial illuminations, dim instincts, embryo-conceptions, have no place in his brain or vocabulary. The twilight of dubiety never falls upon him. Is he orthodox—he has no doubts. Is he an infidel—he has none *either*. Between the affirmative and the negative there is no border-land with him. You cannot hover with him upon the confines of truth, or wander in the maze of a probable argument. He always keeps the path. You cannot make excursions with him, for he sets you right. His taste never fluctuates. His morality never abates. He cannot compromise, or understand middle actions. There can be but a right and a wrong. His conversation is as a book. His affirmations have the sanctity of an oath. You must speak upon the square with him. He stops a metaphor like a suspected person in an enemy's country. "A healthy book!" said one of his countrymen to me, who had ventured to give that appellation to "John Bunce." "Did I catch rightly what you said? I have heard of a man in health, and of a healthy state of body, but I do not see how that epithet can be properly applied to a book." Above all, you must beware of indirect expressions before a Caledonian. Clap an extinguisher upon your irony, if you are unhappily blest with a vein of it. Remember you are upon your oath.

Lamb's humour is, perhaps, not rich, but it is true and rare. The "Dissertation upon Roast Pig," which must be more familiar to most readers than some of his finer and more reserved examples, is surely permeated by a vein of most delicious by-play—full of fanciful irony and humorous suggestion.

Then, for a more refined and ærial spirit—something that lightly carries the ideas into an atmosphere of true exhilaration and hopefulness—"Grace before Meat" should be read; and after that perhaps "Barbara S——," which is not only delicate in every touch, but pervaded by the purest pathos. If Lamb does not in these three essays show that he is a humorist, and, moreover, that he can traverse varied spheres of interest on which to found his humorous sallies, we know not where to find such qualities in the whole range of English literature. It is unjust to judge him as the mere punster and conversationalist. The possession of humour does not of itself imply goodness. But Charles Lamb, in spite of his dram-drinking, was a good man, and his humour draws colour from his character. It is always pure, elevating, and fitted to touch to fine issues, to soften the heart and expand the sympathies.

Mr. Carlyle's magnificent and egotistic celebrations of his father and mother, which proclaim, no less than the pæans sung over the perfections of his wife, the over-intense and therefore limiting and discolouring nature of his genius, may well be contrasted with the naïve and indirect and surely very humorous style in which Lamb unpretendingly, but not the less effectively, celebrates the virtues of

his father and mother—their noble hospitality and gentleness, characteristics in which they do not seem to have been surpassed by Carlyle's parents, so egotistically belauded. Read this passage from the close of the Essay on "Poor Relations," which, in its suggestiveness and half-veiled pathos, exhibits the very elements so lacking in Carlyle's portraiture, thus making it form, in essential respects, a good alternative to that other—restoring faith in human nature, with all its elevating accompaniments, and insinuating softly the finer elements of influence.

This theme of poor relationship is replete with so much matter for tragic as well as comic associations, that it is difficult to keep the account distinct without blending. The earliest impressions which I received on this matter are certainly not attended with anything painful, or very humiliating, in the recalling. At my father's table (no very splendid one) was to be found, every Saturday, the mysterious figure of an aged gentleman, clothed in neat black, of a sad yet comely appearance. His deportment was of the essence of gravity; his words few or none; and I was not to make a noise in his presence. I had little inclination to have done so—for my cue was to admire in silence. A particular elbow chair was appropriated to him, which was in no case to be violated. A peculiar sort of sweet pudding, which appeared on no other occasion, distinguished the days of his coming. I used to think him a prodigiously rich man. All I could make out of him was that he and my father had been schoolfellows, a world ago, at Lincoln, and that he came from the Mint. The Mint I knew to be a place where all the money was coined—and I thought he was the owner of all that money. Awful ideas of the Tower twined themselves about his presence. He seemed above human infirmities and passions. A sort of melancholy grandeur invested him. From some inexplicable doom I fancied him obliged to go about in an eternal suit of mourning; a captive—a stately being let out of the Tower on Saturdays. Often have I wondered at the temerity of my father who, in spite of an habitual general respect which we all in common manifested towards him, would venture now and then to stand up against him in some argument touching their youthful days. The houses of the ancient city of Lincoln are divided (as most of my readers know) between the dwellers on the hill and in the valley. This marked distinction formed an obvious division between the boys who lived above (however brought together in a common school) and the boys whose paternal residence was on the plain; a sufficient cause of hostility in the code of these young Grotiuses. My father had been a leading mountaineer, and would still maintain the general superiority in skill and hardihood of the *Above Boys* (his own faction) over the *Below Boys* (so were they called), of which party his contemporary had been a chieftain. Many and hot were the skirmishes on this topic—the only one upon which the old gentleman was ever brought out—and bad blood bred; even sometimes almost to the recommencement (so I expected) of actual hostilities. But my father, who scorned to insist upon advantages, generally contrived to turn the conversation upon some adroit by-commendation of the old Minster; in the general preference of which, before all other cathedrals in the island, the dweller on the hill and the plain-born could meet on a conciliating level, and lay down their less important differences. Once only I saw the old gentleman really ruffled, and I remember with anguish the thought that came over me: "Perhaps he will never come here again." He had been pressed to take.

another plate of the viand, which I have already mentioned as the indispensable concomitant of his visits. He had refused with a resistance amounting to rigour, when my aunt, an old Lincolnian, but who had something of this, in common with my cousin Bridget, that she would sometimes press civility out of season, uttered the following memorable application:—"Do take another slice, Mr. Billet, for you do not get pudding every day." The old gentleman said nothing at the time, but he took occasion in the course of the evening, when some argument had intervened between them, to utter with an emphasis which chilled the company, and which chills me now as I write it, "Woman, you are superannuated!" John Billet did not survive long, after the digesting of this affront, but he survived long enough to assure me that peace was actually restored; and, if I remember aright, another pudding was discreetly substituted in the place of that which had occasioned the offence. He died at the Mint (Anno 1781) where he had long held, what he accounted, a comfortable independence; and with five pounds, fourteen shillings, and a penny, which were found in his escritoir after his decease, left the world, blessing God that he had enough to bury him, and that he had never been obliged to any man for a sixpence. This was—a Poor Relation.

Of the self-denial and nobility of Charles Lamb's life, one of his biographers gives the following report:—

There was an hereditary tendency to insanity in the Lamb family. Charles himself, it has been said, had for a short time suffered from it, and had spent six weeks in an asylum at Hoxton. The malady next seized his sister, with fatal violence. Mary Lamb, borne down with a constant and harassing struggle with poverty (for they were very poor), had been for some time in bad health, which at last resulted in madness. On September 22, in a fit of sudden frenzy, she seized a knife from the dinner-table, and stabbed her bedridden mother to the heart.

At the coroner's inquest, which was held next day, the jury returned a verdict of lunacy, and Mary Lamb was removed to an asylum, where she gradually recovered her reason. Charles at first bore this sudden and awful blow with an unnatural calmness, which perhaps preserved him from madness. The responsibility which was thrown upon him, however, soon called forth the latent strength of his character. He felt, to use his own words, that he "had something else to do than regret." He saw that if his father was to have those comforts which his age and infirmities rendered indispensable, and if his sister was ever to be restored to the soothing occupations and endearments of home, instead of being permanently consigned to a madhouse, it must be through his own exertions. His brother John, though holding a lucrative place in the South Sea House, with a selfishness which, notwithstanding Charles's affectionate excuses, it is impossible to forgive, never even hinted a desire to share the heavy burden which was thus cast upon him. Charles Lamb felt that he could not contemplate any connection which would interfere with the performance of these sacred duties; and, in accordance with this conviction, his love for the unknown "fair-haired maid" was deliberately and resolutely sacrificed.

During the few months that his father survived Mrs. Lamb's death, Charles gave up almost the whole of his precious leisure to him, and complied cheerfully with all his childish caprices. A letter to Coleridge, dated December 2, 1796, gives a glimpse of the trials he had to undergo to humour and amuse his father:—

"I am got home," he writes, "and, after repeated games of cribbage, have

got my father's leave to write awhile—with difficulty got it ; for when I expostulated about playing any more, he very aptly replied: ' If you won't play with me, you might as well not come home at all.' The argument was unanswerable, and I set to afresh."

Charles Lamb's first care on his father's death, early in 1796, was to release his sister from confinement. This was opposed by his brother John and some other members of the family, who thought that, as there could be no assurance given that her madness would not return, she ought to be placed under permanent restraint. But Charles was resolute, and on his entering into a solemn engagement that he would take care of her and support her through life, he was permitted to remove her to his home. From that time they were hardly separated for a day, except when the return of Mary Lamb's illness rendered it necessary that she should be placed under temporary restraint. His income at this time was only a little more than a hundred a year ; but he always had a reserve fund sufficient for these emergencies. He watched over his sister's health with painful care, and through life bore the heart-breaking anxiety occasioned by his sister's precarious state and frequent relapses—and which, to a man of his exquisite sensibility, must have been so much more terrible in the presence of any actual misfortune—if not without a murmur, yet with a loving effort to spare her the knowledge of the anguish he sometimes endured. Perhaps this life-long devotion was more truly heroic even than the sacrifice of his love. Many a man capable of the one act of self-abnegation might yet have missed this loving

"To the level of every day's
Most quiet need."

Mary Lamb was always conscious of the approach of her illnesses, and submitted voluntarily to medical treatment. Charles Lloyd once met the brother and sister in the fields near Hoxton, both weeping bitterly, walking hand in hand towards the asylum.

And Thomas de Quincey, in one of his less known writings, thus becomes enthusiastic over Lamb's generosity and goodness—a thing he was less and less prone to be, on the printed page, as he advanced in life:—

The Lambs had heard of my being in solitary lodgings, and insisted on my coming to dine with them, which more than once I did in the winter of 1821–1822. The mere reception by the Lambs was so full of goodness and hospitable feeling, that it kindled animation in the most cheerless or torpid of invalids. I cannot imagine that any *memorabilia* occurred during the visit. There were no strangers ; Charles Lamb, his sister, and myself made up the party. Even this was done in kindness. They knew that I should have been oppressed by an effort such as must be made in the society of strangers ; and they placed me by their own fireside, where I could say as little or as much as I pleased. We dined about five o'clock, and it was one of the hospitalities inevitable to the Lambs, that any game which they might receive from rural friends in the course of the week, was reserved for the day of a friend's dining with them.

The very basis of Lamb's character was laid in horror of affectation. If he found himself by accident using a rather fine word, notwithstanding that it might be the most forcible in that place (the word *arrest*, suppose, in certain situations for the word *catch*), he would, if it were allowed to stand, make merry with his own grandiloquence at the moment ; and in after moments he would continually ridicule that class of words, by others carried to an extreme of pedantry. The

word *arride*, for instance, used in the sense of *pleasing or winning the approbation*—just as Charles Fox, another patron of simplicity, or at least humility of style, was accustomed to use the word *vilipend*, as a standing way of sarcastically recalling to the reader's mind the Latinising writers of English. Hence—that is, from this intense sincerity and truth of character—Lamb would allow himself to say things that shocked the feelings of the company, shocked sometimes in the sense of startling or electrifying, as by something that was odd; but also sometimes shocked with the sense of what *was* revolting, as by a swift laying bare of naked, shivering human nature. . . . In miscellaneous gatherings Lamb said little unless an opening arose for a pun. And how effectual that sort of small shot was from *him*, I need not say to anybody who remembers his infirmity of stammering and his dexterous management of it for purposes of light and shade. He was often able to train the roll of stammers into settling upon the words immediately preceding the effective one, by which means the keynote of the jest or sarcasm, benefiting by the sudden liberation of his embargoed voice, was delivered with the force of a pistol-shot. That stammer was worth an annuity to him as an ally of his wit. Firing under cover of that advantage, he did triple execution; for, in the first place, the distressing sympathy of the hearers with *his* distress of utterance won for him unavoidably the silence of deep attention; and then, whilst he had us all hoaxed into attitude of mute suspense by an appearance of distress that he perhaps did not really feel, down came a plunging shot into the very thick of us, with ten times the effect it would else have had.

* * * * *

I knew Lamb (he exclaims in continuation), and I know certain cases in which he was concerned—cases which it is difficult to publish with any regard to the feelings of persons now living, but which (if published in all their circumstances) would show him to be the very noblest of human beings. He was a man in a sense more eminent than would be conceivable by many people, *princely*—nothing short of that—in his beneficence. Many liberal people I have known in this world—many who were charitable in the widest sense—many munificent people; but never anyone upon whom for bounty, for indulgence and forgiveness, for charitable construction of doubtful or mixed actions, and for regal munificence, you might have thrown yourself with so absolute a reliance as upon this comparatively poor Charles Lamb.

If sometimes Lamb's humour tends to render him even in appearances unjust, he likes to make amends tenderly. Though in his essay on "Imperfect Sympathies," for example, he confesses to some dislike to certain traits in the Quakers, how aptly and beautifully elsewhere he can render atonement:—

The very garments of a Quaker seem incapable of receiving a soil; and cleanliness in them to be something more than the absence of its contrary. Every Quakeress is a lily; and when they come up in bands to their Whitsun conferences, whitening the easterly streets of the metropolis, from all parts of the United Kingdom, they show like troops of the Shining Ones.

Again, see how lightly he can touch the self-pitying side of human nature. He is dealing with the "Convalescent," but the Convalescent of a particular type; and his touches succeed each

other with a perfect sense of fairness, notwithstanding his fine vein of humour, which would tempt to exaggeration and injustice :—

He has put on the strong armour of sickness, he is wrapped in the callous hide of suffering ; he keeps his sympathy, like some curious vintage, under trusty lock and key, for his own use only.

He lies pitying himself, honing and moaning to himself ; he yearneth over himself ; his bowels are even melted within him, to think what he suffers ; he is not ashamed to weep over himself.

He is for ever plotting how to do some good to himself ; studying little stratagems and artificial alleviations.

He makes the most of himself ; dividing himself, by an allowable fiction, into as many distinct individuals as he hath sore and sorrowing members. Sometimes he meditates—as of a thing apart from him—upon his poor aching head, and that dull pain which, dozing or waking, lay in it all the past night like a log, or palpable substance of pain, not to be removed without opening the very skull, as it seemed, to take it thence. Or he pities his long, clammy, attenuated fingers. He compassionates himself all over, and his bed is a very discipline of humanity, and tender heart.

And this is the kind of man who, though certainly not without his faults, remained noble in his mind and in his private life, passing through deep sufferings uncomplainingly, and exercising many self-denials, who remained genial, and who ever delighted to relieve the pains and the trials of others—and yet, of whom Mr. Carlyle can write as follows :—

Charles Lamb and his sister came daily once or oftener ; a very sorry pair of phenomena. Insuperable proclivity to gin in poor old Lamb. His talk contemptibly small, indicating wondrous ignorance and shallowness, even when it was serious and good-mannered, which it seldom was, usually ill-mannered (to a degree), screwed into frosty artificialities, ghastly make-believe of wit, in fact more like “diluted insanity” (as I defined it) than anything of real jocosity, humour, or geniality. A most slender fibre of actual worth in that poor Charles, abundantly recognizable to me as to others, in his better times and moods ; but he was cockney to the marrow ; and cockneydom, shouting “glorious, marvellous, unparalleled in nature,” all his days had quite bewildered his poor head, and churned nearly all the sense out of the poor man. He was the leanest of mankind, tiny black breeches buttoned to the knee-cap, and no further, surmounting spindle-legs also in black, face and head fineish, black, bony, lean, and of a Jew type rather ; in the eyes a kind of smoky brightness or confused sharpness ; spoke with a stutter ; in walking tottered and shuffled ; emblem of imbecility bodily and spiritual (something of real insanity I have understood), and yet something, too, of human, ingenuous, pathetic, much enduring. Poor Lamb ! he was infinitely astonished at my wife, and her quiet encounter of his too ghastly London wit by a cheerful native ditto. Adieu, poor Lamb !

Only think of Carlyle's notion of hospitality and friendliness, and of the reverence and reticence which the giving and receiving of such attentions as these should imply ! Charles Lamb and his sister went, Carlyle himself says, “once a day *or oftener*” to visit him at a

period. Clearly, then, they went believing that they derived kind of cheering aid on their thorn-strewn way; believing doubtless, that they gave some pleasure, and depending upon confidence which such mutual intercourse and mutual enjoyment and. Brave, old, broken-down creatures, affecting a cheerfulness and humour (on Charles's part still adequate to a pun, alas!) wherever they could, to ward off thoughts of the insanity that dogged them throughout their lives, like some worse Brocken-spectre that could not be left behind! They fancied Carlyle was their friend and helper, and went oftener than they were wanted, apparently. But Carlyle does not speak his honest feelings—ah, no! He lets them come and go, and sardonically laughs at them, jests about “imbecility” and “insanity,” and vents his spleen and contempt on paper, to be posthumously given to the world! We shall only say again, let any one who wants a true alterative or relief from Carlyle's grim and black-browed chuckle of almost brutal self-satisfaction in such self-revelation, take down Elia's essays, and read that on “Poor Relations” carefully to the end; and then thank Heaven for the beautiful, bountiful gift of true humorous geniality, and, what is yet higher and better, faith in human nature, which is, *pace* Carlyle, happily preserved to us in literature that he would dub cockney and treat with a malignant scowl; as if it were impossible for a cockney to have a heart, or that it were always possible even for a great Scotchman to have a big one.

ALEX. H. JAPP.

THE NAMES OF THE ENGLISH COUNTIES.

THE English counties, classified with regard to their origin as territorial divisions, fall into three groups, which may be loosely designated as the Southern, the Midland, and the Northern. The historical characteristics of the several groups are reflected in the character of their nomenclature, so that it will be convenient to adopt this classification in our discussion of the etymology of the county names.

The distinction between the counties of the Southern and those of the Midland groups has been felicitously expressed by Mr. Freeman, in the statement that the former are older than England, the latter younger than England. It may be necessary, however, to explain the matter a little more at length. The Southern counties are divisions which had a recognised existence long before a united realm of England was either realised or imagined. In some cases they were originally Celtic principalities, which retained their individuality and their ancient limits after they had passed under Teutonic rule. In other cases, the counties represent the territories severally occupied by the different tribes, or the different invading bands, by whom the conquest of the country was effected. Instead of saying that the South of England was divided into counties, it would be a truer representation to say that the "counties," if we may here use that term, were united to form one kingdom.

With respect to the Midland district the case was otherwise. The ancient territorial divisions which existed in the early days of the English occupation had been obliterated by the Danish invasions; and when the Danish rule was brought to an end, the country was arbitrarily divided for administrative purposes into areas of tolerably equal extent, each bearing the name of its most important town. The counties of York, Lancaster, and Durham, although differing in origin from those of the Midland group, must, so far as the character of their nomenclature is concerned, be regarded as belonging to the same class.

The three Northern counties—Northumberland, Westmoreland,

Cumberland—resemble those of the South of England, and differ in the Midland counties, in that they are divisions which arose, to speak, spontaneously, and not as the result of any intentional celling-out of a previously existing whole.

Having thus marked out the ground, we now proceed to the explanation of the names of the several counties, beginning with those of the Southern group.

There are two of these counties, Kent and Devon, which bear Celtic names without any Saxon affix. The fact has in each case a special historical significance.

We read in the Roman writers of a Celtic kingdom of Cântium, considerably greater in extent than the present county of Kent. We also find the name of “The Cantian promontory” applied either to the North Foreland, as is usually supposed, or more probably to the South Foreland. The retention of the British name by the Teutonic conquerors is a fact which accords well with the historical legend which represents the conquest of Kent as effected by a band of mercenaries who turned their arms against the people whom they had come over the sea to defend. The etymology of Celtic place-names in England is generally open to some doubt, owing to our ignorance of the precise characteristics of the various local dialects of the ancient British speech. It is, however, to be remarked that Nennius and the Welsh writers give the name of Kent under the form Ceint, or in modern orthography, Caint. The word *caint* in modern Welsh would mean “Champaign country;” and, subject to the reserve just mentioned, we may reasonably assume this to be the meaning of the name. It is true that, if this interpretation be correct, the name of Kent is properly descriptive of a portion only of the territory to which it was applied; but this is a phenomenon so frequently occurring in local nomenclature, that it affords no reason for doubting the truth of the etymology.

The earliest appearance of the name of Devon is under the Latinised form, Dumnonii, or Damnonii, the designation by which the Roman writers speak of the inhabitants of Devonshire and Cornwall. At an early period in the history of the Celtic languages, the letter *m* in the middle of a word became softened into *v* (in modern Welsh written as *f*), so that the name which the Romans wrote as Damnonii, appears in the Welsh writers as Dyfneint, and in the Saxon chronicle as Defn-sæte and Defena-scír. The word Dyfneint appears to mean *deep valleys*. The geographer Ptolemy makes mention of Damnonii in Scotland, who have often been supposed to have been an offshoot from, or at least ethnically akin to, their

namesakes in the south. As, however, their territory included the famous glens of Campsie and Kilsyth, it seems more probable that these northern Damnonii also received their name from the character of the country which they inhabited. The Irish annals speak of a Celtic tribe whom they call Fír Domhnann, a name which is identical with Dumnonii, and is traditionally explained as meaning "the men of the deep pits."

The Celtic principality of Devon retained its independence long after the establishment of the neighbouring kingdom of Wessex. The Saxons had thus time to become familiar with the British name, which they naturally preserved after the country had been subjected to their own rule.

The western portion of the Damnonian territory had a name of its own, which appears in Welsh as Cernyw. It is usual to suppose this name to be connected with the British word *corn*, a horn, in allusion to the shape of the Cornish peninsula. This explanation is so happily descriptive, that it is difficult to abandon it. It seems more probable, however, that Cernyw is the Cornish *kernow* (as in the local name Porthkernow), the plural of *carn*, a rocky hill. A glance at the long list of "carns" in the index to a Cornish guide-book will show that this etymology is not less correctly descriptive than the common one. The Saxon name *Corn-wealas*, whence our Cornwall, means the "Welshmen" (i.e. foreigners, *barbari*) of Cernyw, just as the Romans were called *Rúm-walas*.

It is interesting to observe that we find the word Cernyw in the appellation of Kernewotes, which is borne by the inhabitants of the district of Cornouailles, in the south of Brittany. The *carns* are a feature as prominent in the topography of this district as in our Cornwall. With Kernewotes we may perhaps compare the Carnutes of Central Gaul. The coincidence in form between the names of Cornwall and Cornouailles is puzzling. It is absurd to suppose, as is sometimes done, that the Cornish exiles carried with them to Brittany the Saxon name of their country; and the mediæval explanation of Cornouailles as "Cornu Galliæ" is equally inadmissible. Not to mention other objections, it is enough to point out that Cornouailles is not the portion of Brittany to which such a designation would be naturally applied. Perhaps the most reasonable supposition would be that the French name was borrowed from England at an early date. Such a transference might easily have been suggested by the recognised identity in language and name of the inhabitants of the two districts.

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There are three others of the Southern counties which still bear

names of ancient kingdoms. These are Sussex, Essex, and Middlesex, which, as everyone knows, were the territories of the North, East, and Middle Saxons. The last-mentioned people derived their name from the situation of their country between the East Saxons and the West Saxons.

The name of Berkshire (in the chronicles *Bearwucscír*, *Bearwucscír*) is in most popular books of etymology derived either from the birch-trees growing there, or from the "bare oak," supposed to have been the place of rendezvous for the public meetings of the shire. Neither explanation could be entertained for a moment by any competent scholar, although the second of them may be admitted to be a decidedly ingenious guess. The true etymology is furnished to us by Asser, the biographer of Alfred, who states that the shire was named from a wood called *Berroc*, "where the box-tree grows abundantly." This word *Berroc*, or *Bearwuc*, is probably a diminutive of the Saxon *beorn*, a grove.

The North-folk and the South-folk—in their modern form, Norfolk and Suffolk—were the two divisions of the kingdom of East Anglia. It does not, however, appear whether this division originated while the Angle kingdom still existed, or whether it was made by the Danish conquerors.

Surrey (Anglo-Saxon, *Súthrige*) is perhaps the most difficult name to explain in the whole list of counties. The common reading of the name as *Súth-rice*, the southern kingdom, although some respectable names amongst the earlier philologists may be quoted in its favour, is quite impossible. It is to be remarked that *Súthrige* is a plural, signifying not the country, but the inhabitants, like *Seaxe* for Saxons, or *Engle* for Angles. The Saxon expression for "in Surrey" was *on Súthrigum*—"among the Southries," as we might write it. Asser couples together the *Cantuarii* and the *Suthrii*—the Kentishmen and the Southries; and *Bæda*, who in his Latin sometimes employs an English word with its native inflection, gives us the name in the genitive plural—"regio *Sudergeona*."¹ The least unsatisfactory explanation of *Súthrige* seems to be "the people of the southern islands." It is true that there appear to be no examples in Anglo-Saxon literature of the forms *northr*, *suthr*, *austr*, *westr*, under which the names of the cardinal points occur in Icelandic compounds. Such place-names as Northerton, Southerton, Westerham, however, seem to indicate that these at some period existed in the

¹ The elision of the *i* in this form is sufficient to show that it cannot be the long *i* of rice. But this view will scarcely now be maintained by any good Anglo-Saxon scholar.

Anglo-Saxon language. On this assumption, *Súthr-ig* becomes an admissible form for southern island. There is nothing repugnant to analogy in the formation of a tribal name by the mere addition of the plural ending *e* ; and a glance at the map of Surrey will be sufficient to show how easily that county might come to be spoken of as a group of islands. Chertsey, which stands on one of the many river peninsulas of this region, is referred to by Bæda as “Cerotaes-ig, id est Ceroti insula.”

A separate class is formed by the two names, Somerset and Dorset. To these we may add a third, viz., Wilset ; for although this name is not found in our modern list of counties, it is only by accident that it has been displaced by the later form, Wiltshire. The Sumorsæte, the Dornsæte, and the Wilsæte were respectively the inhabitants of the regions adjacent to the towns of Sumertún, Dorn-ceaster, and Wil-tún. It would seem that the existence of these names of towns suggested the formation of apparently analogous compounds by the substitution of *sæte* for *tún* or *ceaster*, much in the same way as the word “Whitsunday” has given rise to “Whitsuntide” by the substitution of the ending “tide” in the place of “day.” That this is the correct account of the matter, appears from the fact that *Sumorsæte* and *Dornsæte*,¹ taken by themselves, are as unmeaning as “Whitsuntide ;” while the river Wily, from which *Wiltún* is derived, is scarcely important enough to have given a name directly to the whole district. The meaning of the name *Sumertún*, which belongs to several places in the south of England, may be illustrated from the Welsh word Hafod, which is of frequent occurrence as a local name, and is explained in the dictionaries as meaning “summer residence” or “dairy farm.” The first syllable in Dornceaster is a contraction of the British name which the Romans represented as Durnovaria. The precise etymology of this name is a little obscure, but the first syllable appears to be the well-known word for water, and the latter portion seems to be a derivative of the root *nof*, to flow, which occurs in the river-names Naver and Nore. The river Wily, which gave its name to Wiltún, is mentioned by Asser as Guilou, which in modern Welsh orthography is *gwy-loyw*, clear stream.

Although the names of Somerset, Dorset, and Wilset are derived, like those of the Midland counties, from the names of towns, it will

¹ It is often stated that Dorset is derived from the Celtic tribe of the Durotriges ; but the form *Dorn-sæte* shows clearly that it must be referred to the name of the Roman city Durnovaria. Asser's *Durnguis* (compare the modern Welsh Gwenhwys for “people of Gwent”) is probably a mere translation of *Dorn-sæte*.

Observed that they differ from them in form. This difference in formation of the names corresponds to a difference in the origin of the counties themselves. The three counties referred to are not mere artificial districts ("departments," to borrow Mr. Freeman's word) arbitrarily marked out round the towns from which they are named. Each of them represents the territory occupied by a distinct body of Saxon colonists.

The later name, Wiltúnsclr, Wiltshire, however, by which that of Wilset was superseded, might, so far as its form is concerned, be the name of a Midland shire; and in Hámtúnsclr, now Hampshire, we have another Southern county with a name precisely of the Midland pattern. Like the Midland counties, Hampshire is an artificially formed district, in which the older territorial divisions (Meanware, and doubtless others) have been swallowed up. The name of Hámtún—the modern form, of course, would be "home-town"—may have denoted the homestead occupied by the lord of a large estate, as distinguished from the outlying "túnas" occupied by his dependants, or it may have denoted the first founded village in what we should term a colony. In either case, there are in England some score of places originally bearing this name, without any distinctive prefix, besides many others in whose names this compound appears as an ending. Two of these Hamptons rose to the position of chief towns of shires, and were then distinguished by the prefixes North and South. It has frequently been maintained that in these two instances the name of Hámtún was suggested by the situation of each place upon a river called Anton. But the identification of the Antona of Tacitus with the Nen has been shown to be very improbable; and the name of Anton (given to the Test at Southampton) appears to be the invention of mistaken antiquaries who have identified this stream with the Trisanton of Ptolemy. Even if it were proved that these two rivers really bore the name of Anton, the resemblance of sound between it and Hámtún might reasonably be looked upon as a mere coincidence.

We now come to the counties of the Midland group, which, with one exception, bear the name of their chief towns. The one exception is in the case of Rutland. The earliest ascertained mention of this name seems to be in Domesday Book (*Roteland*), though it occurs also (under the same spelling) in a probably spurious Westminster charter of Edward the Confessor. The apparently late origin of the name, and the absence of any clear etymology for it in Anglo-Saxon, seem to point to the conclusion that it is probably of Danish origin. With some degree of hesitation, owing to the want

of documentary evidence, we may venture to read it as *Hrútaland*, from *hrútr*, a ram. The name, as thus interpreted, is synonymous with that of Wetherley Hundred in Cambridgeshire. The word *hrútr* enters into the composition of several local names in Iceland.

In discussing the etymology of the names of the Midland county towns, it will be convenient to group them, not according to their situation on the map, but according to the nature of their derivation.

In five of these names the ending *chester*, or *caster*, informs us that the places to which the names belonged had been occupied by the Romans. The word *caster* is the Latin *castrum* (not, as usually stated, the plural *castra*, a camp), which under the empire was used in the sense of city, and which the Anglo-Saxons borrowed to denote a Roman town.

One of our county towns now bears as its name the word *Chester* without any prefix. In Anglo-Saxon documents, however, its name was *Legeceaster*, in which the first element is the Latin word *legio*. The Welsh still call Chester *Caerleon*, which means, not “the camp of the legion,” but “the city called Legio.” The word *legio* was often used as a substitute for the proper name (in this case, *Ideva*) of the town at which a legion was stationed.

The name *Legeceaster* very closely resembles the original form of *Leicester*—*Legera-ceaster*, or *Ligran-ceaster*. In fact, the two names are often confounded even in the Saxon chronicles. It seems natural at first sight to suppose that the two names have the same etymology. But to derive *legera* from *legio* involves too great a licence, and the true explanation of the name is probably to be found in the statement that the river Soar was formerly called the *Leire*. The principal affluent of the Soar, above Leicester, has on its banks a village called *Leire*, from which it may be inferred that the name of this tributary was *Legera* or *Ligra* (compare the *Liger*, now *Loire*, in France), and that the united stream was called indifferently by the name of the one or the other of its component branches.

The Roman name of Gloucester was *Glevum*. Our ancestors retained this name in the form of *Glaivan-ceaster*, of which the modern Gloucester is a corruption. The Romans, as we know, were in the habit of calling their new towns by the simple names of the rivers on which they stood (for instance, *Deva*, *Isca*, *Derventio*), and it seems likely that the word *Gloyw*, clear or bright, may have been the British name, either of the portion of the Severn near Gloucester, or of some small tributary stream.

Worcester is mentioned by *Bæda* as *Wigornia*, and in the earliest Saxon charters as *Wæogornia-ceaster*, which was afterwards corrupted

into Wigera-ceaster, Wirecester, and Worcester. The name Wigornia is unquestionably British, and the most obvious etymon seems to be *gwy-gorn*, the river-horn, which would be a very apt name for the remarkable peninsula intercepted between the Severn and the Teme. The Roman city seems to have stood on the left bank of the Severn, just inside this peninsula at its point. Whatever may be thought of this etymology, there need be no hesitation in rejecting, for half-a-dozen reasons at once, the common notion (based on the corrupt form Wigera-ceaster) which connects the name with the Saxon nation of the Hwiccas.

Lancaster is the "ceaster" on the river Lon or Lune. The pronunciation *caster*, instead of the usual *chester*, has a significance of its own. We find that this pronunciation of local names is characteristic of a distinctly marked district, which may be approximately described as including *North* Lancashire, Yorkshire, Lincolnshire, Rutland, and Norfolk. Outside this district—and to the north of it, be it remarked, as well as to the south-west—we meet only with the form *chester*, corrupted in some places into *cester* or *ceter*. It will be observed that the region of the *casters* coincides pretty nearly with the region in which Danish elements are most prominent in the local nomenclature, and in the modern English dialects. There seems, however, no reason to suppose that the retention of the hard *c* is itself to be ascribed to Danish influence. It is rather to be regarded as a note of the native English dialect of this region, which perhaps we may venture to call the pure Anglian as distinguished from Saxon. As this dialect is known to have strong Scandinavian affinities, it would naturally be more liable to be modified by contact with Danish speech than would the language of other parts of England.

If we are right in regarding the pronunciation "caster" as a mark of the Anglian dialect, it follows that there must have been a *wedge*, so to speak, of Saxon population in the extreme north-east of England. This inference is confirmed by several historical indications, and by the language of the few Anglo-Saxon charters given in Raine's "History of North Durham."

According to the theory commonly held, there is yet another county town whose name gives evidence of having been occupied by the Romans. This is Lincoln, which is usually explained as a corruption of Lindum Colonia. But although Lindum certainly was a place of great importance in Roman times, there is no real proof that it ever attained to the dignity of a Roman colony. No indication of the fact appears, where we should have expected to find it, either

in Antoninus, in Ptolemy, or in any extant inscription. The sole authority for the "colony" is "the Ravenna Geographer," who wrote in the seventh century after Christ. It seems most probable that the "Lindum Colonia" of this writer, as well as Bæda's Lindocolinum, and the Lindcylene of the Chronicles, is a corruption of the full Celtic name which commonly appears abbreviated as Lindum. Now, the "Witham river," on which Lincoln stands, must unquestionably have had an earlier British name. If we assume that this name was the common one of Colne, we may then interpret the name of the city as *Llyn-culan*,¹ the pool of the Colne, and Crococolana, a Roman station on the same river, as *Crûg-culan*, the mount by the Colne.

The name of the district in which Lincoln stands, Lindissi (now Lindsey), may be explained as *Llynwys*, the dwellers by the lake. It is noteworthy that Nennius mentions a *regio Linuis* as the locality of one of Arthur's battles. Two MSS. of Nennius have on this name the gloss "id est Lindesey"—a conjecture which may be geographically wrong and philologically right.

The three names, Buckingham, Warwick, and Nottingham—in their oldest form, Buccingahám, Wæringawic, and Snotinga-hám—are derived from Anglo-Saxon clans or tribes. The Teutonic tribal names ending in *-ingas* are in general of very obscure origin. It is quite a mistake to suppose that they are all "patronymics," derived from the name of some real or supposed ancestor. Some of them, no doubt, are so ; but there is evidence that many others are derived from the local names of the districts in Germany from which the tribes migrated, or from words descriptive of the character of the regions in which they settled. It is possible that the Buccingas, whose "home" was at Buckingham, may have taken their name from the buck as a tribal emblem. The common derivation of Buckingham, from the beeches abounding in the neighbourhood, is philologically impossible. The Wæringas, whose "wick" or fortress was at Warwick, are (at least in name) identical with the famous Væringjar or Varangians of Scandinavia. Nothing can be said with certainty of the etymology of their name, nor of that of the Snotingas, who inhabited Nottingham. We learn from Asser's Life of Alfred, that the Britons called Nottingham Tigguogobauc (in modern Welsh spelling, Tŷ-ogofog) "the House of Caves"—a designation which is still strikingly descriptive of the locality. Etymologists in general have imagined that this British name was intended as a translation of

¹ The original form of the Welsh *llyn* was probably *lind*, as the modern *gwyn* (white) was anciently written *gwynnd*,

Snotingahám. The Saxon name, however, cannot be made to yield any such meaning ; and the statement of Asser therefore points to the very interesting conclusion that a Welsh-speaking population must have lingered in the neighbourhood of Nottingham as late as the eighth century.

We may next speak of the county towns which bear names ending in *ford*—Stafford, Bedford, Hereford, Hertford, and Oxford. The usual explanation of Stafford is “a place where the river was fordable by means of *staves* or stilts.” It is not impossible that this explanation may be correct. The name, however, may simply mean that the position of the ford was indicated by a staff or post. It should be remarked that the word *staff* occurs as an element in other local names—for instance, Staveley, which is borne by several places in England, and seems to denote a piece of land marked off by stakes or posts.

Bedford, assuming it to be the place mentioned in the Saxon chronicle as Bedicanford or Bedcanford, is derived from the not uncommon personal name Bedca or Beadeca.

Hereford is in Saxon the ford capable of being crossed by an army. The place has however been known in Welsh, ever since the tenth century, as Henffordd, the old road ; and considering the situation of the city, it seems most natural to suppose that the English name is an early corruption of this.

The name of Oxford is in the chronicles Oxnaford—the ford of the oxen. On the map of Germany we find an Ochsenfurt and a Schweinfurt, and in England there are several places called Swinford and Shefford (sheep-ford). These analogies render it needless to assume, as many writers have done, that the name of Oxford was suggested by the sound of the river-name Ax or Ux (the Gaelic *uisge*, water). Besides, there is no real evidence that the so-called “Isis” ever bore any such name as this hypothesis would require.

The apparent etymology of Hertford is precisely analogous to that of Oxford ; and here also there is no reason for doubting that the obvious explanation is the correct one. Those who had frequently seen a *hart* wading across a particular portion of a stream would quite naturally be led to give a name to the place from that circumstance. Many etymologists, however, have thought this explanation unlikely, and have maintained that the first syllable of the name was a corruption of the Cymric *rhyd*, a ford. But it should be noted that there are several other Hartfords and Hartfords in England, and although such a corruption might have taken place in a single

case, it could scarcely have occurred in half-a-dozen unconnected instances. It may be mentioned that local names with the meaning of "deer-ford" and "ox-ford" are found also in Ireland.

After the names ending in "ford" comes naturally that of Cambridge, which is, of course, the bridge over the Cam. The latter name means in Celtic *crooked*. The Cam, however, is certainly not characteristically described as a crooked river; and it seems likely that this name (which has now superseded the Saxon appellation of Granta) belonged originally to the *bend* of the river on which the town stands.

It is singular that only one of our names of county towns contains the ending *borough* or *bury*, which is so common an element in the names of important places in England. The single example is Shrewsbury, in Anglo-Saxon, Scrobbesbyrig. The common interpretation of this name is "the borough in the *scrub* or thicket." This derivation may seem at first sight rather unlikely, because the genitive case is seldom used in Saxon compounds except to express a strictly possessive relation, so that it would appear more obvious to derive Scrobbesbyrig from Scrob as a personal name. However, a Chertsey document of the 13th century makes mention of a road called Shrubbeddedde, which seems to afford a satisfactory analogy in support of the received explanation. The name of Shropshire is a corruption of Scrobbesbyrig-scír. The combination *shr* being unpronounceable to Norman lips, the writers of Domesday Book got over the difficulty by spelling Shropshire as Sciropescire. Other writers, less accurate, turned *Scrob* into "Slop," which was afterwards further euphonised into Salop.

There now remain five of the towns which give their names to counties, which do not belong to any of the classes above enumerated. These are Huntingdon, Monmouth, Derby, York, and Durham.

The name of Huntingdon, in its modern form, looks as if it were derived from a Saxon clan-name. The original form, however, is Huntan-dún, the hunter's hill, although it is not impossible that Hunta may be here a personal name.

Monmouth is the mouth of the river Mynwy. This river-name is perhaps capable of being explained from Celtic sources, but Professor Rhys, our greatest authority on the Celtic languages, prefers (on the ground of certain theories which at present are scarcely to be regarded as established) to regard it as a vestige of the primitive pre-Aryan population of Western Britain.

The name of Derby (in the Saxon documents, Deoraby) is, as its affix shows, of Danish origin. The Danish population of the place

would certainly themselves suppose that the name either meant the town of deer (or wild animals) or that it was derived from the name of an owner, Dýri. In all probability, however, the name was suggested by the sound of the river-name Derwent. It is to be noticed that two places named Darley are found on the same river, and on the Yorkshire Dearne there are places named Darfield and Darton.

Our present name of York is a contraction of the Danish form Jorvik. This, again, is a corruption of the Anglian Eoforwic, which (meaning "wild-boar-town") is an attempt at making sense of the British name, which is known to us in the Latin form Eburacum. The analogy of similar names in Gaul and Spain would lead us to suppose that Eburacum is derived from the name of a river Ebura, which would therefore seem to have belonged to the Ouse.

The name of Durham is a Norman corruption of Dúnholm, which means the holm or meadow-land surrounding a hill.

The three northern counties, Northumberland, Cumberland, and Westmoreland, resemble in their origin and nomenclature rather the counties of the Southern than those of the Midland group. They were originally not mere administrative divisions, but territories of distinct populations; and their names are not derived from towns, but are descriptive of the entire regions to which they are applied.

The name of Northumberland, as everyone knows, originally belonged to the whole of the English land north of the Humber. When the shire of York and the bishopric of Durham had been carved out of this undefined tract, the original name naturally became appropriated to the remaining portion. It thus happens, curiously enough, that the etymology of Northumberland involves that of the name of the Humber, a river from which the county is nearly eighty miles distant. Various attempts have been made to explain the word Humber; but most of them are set aside by the fact that the name is borne by several minor streams in various parts of England, and therefore cannot well have any meaning which is only appropriate to a large river. There seems to be no valid objection against reading it as *ynfer* (the Cymric equivalent of the Gaelic *inbher*), which denotes the junction of a river either with a larger river or with the sea. The modern Welsh form, Hymyr, presents no difficulty, as it is evidently derived from the English name.

Cumberland (in the Saxon Chronicle, Cumbraland) is commonly explained as the land of *combes*, or valleys. This interpretation, however, is grammatically impossible, and there is no doubt that the name means the land of the Cymry. The name was given by the Scandinavian conquerors of the north-west. The Britons of the

Strathclyde kingdom are spoken of in the Sagas as Kumrar, whence the name of the Cumbraes (Kumra-eyjar, islands of the Cymry) in the Frith of Clyde.

Westmoreland (Westmoringa-land) is the land of the Westmoringas, or dwellers on the western moors. This name is of Anglo-Saxon, not of Scandinavian formation, and shows that the district was a western offshoot of the Anglian kingdom of Northumbria.

The forty names which have now been examined constitute a curiously accurate miniature representation of the character of English local nomenclature in general. All the successive races (of known language) which have occupied South Britain have left some traces in this list, and their respective contributions, except in one instance, bear nearly the same mutual proportions as in the place-names of the country at large. The purely Celtic names in the list are four, and ten other names contain Celtic elements. The Roman conquerors are represented only indirectly, by the five "chesters." Of names wholly Anglo-Saxon there are twenty-two, and of names partially Anglo-Saxon there are nine. The Danish element appears only in five names, including the somewhat doubtful cases of Norfolk and Suffolk. This small number is, of course, no measure of the proportion of Danish names in the general body of English local nomenclature. The villages bearing Danish names are obviously of more recent origin than those bearing names of Celtic or Anglo-Saxon etymology ; and at the time of the division into counties only one of them had grown into sufficient importance to be selected as a chief town. Names of Norman origin do not exist in the list of counties ; but two names, Salop and Durham, have undergone modification in accordance with Norman notions of euphony.

HENRY BRADLEY.

CHARLES DICKENS IN THE EDITOR'S CHAIR.

THE figure of the amiable, accomplished, and ever-to-be-regretted Charles Dickens has been brought before us "even in his habit as he lived," with abundance of detail and colour. Mr. Forster's complete and admirable biography, done with the taste and workmanlike finish of a true "man of letters," will be more and more esteemed as the time from his death lengthens. Objection was indeed taken to the biographer accompanying his hero about as closely as Boswell did Johnson; but this really brought before the world much that would otherwise have been lost or unseen; and in the last volume, where the author seems to have accepted this criticism and to have become historical, there is a sensible loss of dramatic vividness. Lately the world has received the closing collection of his Letters, edited by Miss Hogarth and Miss Dickens, and set off with a graphic and most pleasing commentary whose only fault is that of being too short. Here his *gaieté de cœur*, his unflagging spirit, wit, and genial temper, are revealed in the most striking way.

There is, however, one view of him which has scarcely been sufficiently dealt with—namely, his relations with his literary brethren and friends, as editor and otherwise. These exhibit him in a most engaging light, and will perhaps be a surprise even to those abundantly familiar with his amiable and gracious ways.

In the old *Household Words* days, the "place of business" was at a charming little miniature office in Wellington Street—close to the stage door of the Gaiety Theatre. It seemed all bow window; at least, its two stories—it had only two—were thus bowed. The drawing-room floor seemed a sunshiny, cheerful place to work in. This is now the workshop of another magazine, the *Army and Navy*. But I always pass it with respect and affection. I never came away from it without taking with me something pleasing.

Often, about eleven o'clock, he was to be seen tramping briskly along the Strand, coming from Charing Cross Station, fresh from his pleasant country place in Kent, keen and ready for the day's work,

and carrying his little black bag full of proofs and M.S. That daily journey from Higham station, with the drive to it in his little carriage or wisk car, took full an hour each way, and I was a serious slice out of his time.

It is always a problem to me why business men, to whom moments are precious, should be thus prodigal in time devoted to travelling—coming from Brighton and returning at headlong speed. At Bedford Street, by the bootmaker's shop, he would turn out of the Strand—those in the shops he passed would know his figure well, and told me after his death how they missed this familiar apparition—and would then post along in the same brisk stride through Maiden Lane, past "Rule's," where he often had his oyster, through Tavistock Street, till he emerged in Wellington Street, the last house he passed before crossing being "Major Pitt's," the hatter's. This mention of "Major Pitt" suggests that it was always pleasant to see what pride the tradesmen took in having him for a customer, and what alacrity they put to his service, or to oblige him in any way. This I believe was really owing to his charming hearty manner, ever courteous, cordial, and zealous; his cheery fashion of joking or jest, which was irresistible. The average tradesman has small sympathy or intelligence for the regular literary man. It is sometimes *caviare* indeed to them.

Our writer, however, was a serious personality of living flesh and blood, and would have made his way in life under any condition. His extraordinary charm of manner, never capriciously changed, the smile and laugh always ready—the sympathy, too, that rises before me, and was really unique—I can call no one to mind that possessed or possesses it now in the same degree. Literary men, as a rule, have a chilliness as regards their brethren; every one is more or less working for his own hand. Yet, few men had more anxious responsibilities or troubles to disturb them, or so much depending upon them as he had in many ways. I believe the number of people who were always wanting "something done for them," either in the shape of actual money advances, or advice, or productions "to be taken," or to be seen, or to have their letters answered, or who desired letters from him in their interests, was perfectly incredible. Many a man takes refuge in a complete ignoring of these worries, which would require a life to attend to. An eminent and highly popular man of our own day, who is thus persecuted, has adopted this latter mode, and rarely takes notice of a letter from a friend or stranger, unless he is so minded to do. He is strictly in his right. You are no more bound to reply to persons that do not know you, than you are to

acknowledge the attentions of an organ-grinder who plays for an hour before your window.

Another little *Household Words* tradition was this. The "chief" himself always wrote with blue ink on blue paper. His was a singularly neat and regular hand, really artistic in its conception, legible, yet not very legible to those unfamiliar with it. Here, as in everything else, was to be noted the perfect *finish*, as it might be styled, of his letter-writing—the disposition of the paragraphs, even the stopping, the use of capitals, all showing artistic knowledge, and conveying excellent and valuable lessons. His "copy" for the printers, written as it is in very small hand, much crowded, is trying enough to the eyes, but the printers never found any difficulties. It was much and carefully corrected, and wherever there was an erasure, it was done in thorough fashion, so that what was effaced could not be read. Nearly all the band followed his example in writing in blue ink and on blue paper, and this for many years: but not without inconvenience. For, like the boy and his button described by Sir Walter Scott, the absence of paper or ink of the necessary colour affected the ideas, and one worked under serious disabilities, strangeness, &c. Another idiosyncrasy of his was writing the day of the month in full, as "January twenty-sixth."

It is in his relations with writers in his periodical, and, indeed, in all connections with his "literary brethren," as he modestly called them, that this amiable and engaging man appears to the most extraordinary advantage. As I read over his many letters on those points, I am amazed at the good-natured allowance, the untiring good humour, the wish to please and make pleasant, the almost deference, the modesty in one of his great position as head, perhaps, of all living writers—to say nothing of his position as director of the periodical which he kindled with his own perpetual inspirations. There was ever the same uniform good nature and ardour, the eagerness to welcome and second any plan, a reluctance to dismiss it, and this done with apologies; all, too, in the strangest contrast to the summary and plain-spoken fashion of the ordinary editor. I fancy this view has scarcely been sufficiently brought out in all the numerous estimates of this most charming of men. And, at the risk of some intrusion of my own concerns, I shall be enabled to show him in even a more engaging and attractive light. The various accounts have scarcely been concerned with this side of his character.

This patient interest should, in these editorial matters, become more wonderful when it is considered that his position as head of an important periodical made him a marked figure for impor-

tunity. Many of his friends were tempted to become "literary." They even had *their* friends who desired to become literary, and under pressure would introduce to this great writer immature and unprofitable efforts which he had to put aside with what excuses he could. Then there were his "literary brethren," each with his "novel" or short paper, which it would occur to him some morning "he would send off to Dickens." These had to be considered, and his good nature or courtesy drawn upon. As for the general herd of scribblers, the postman on "this beat" could give due account of the packages of MS. that daily arrived. It was no wonder that he had to compose a sort of special circular answer, which was duly lithographed and returned with their productions to the various candidates. I believe every composition was seriously glanced at, and some estimate made—and many an obscure clever girl was surprised to find her efforts appreciated. The usual rejection-form was as follows:—

Sir,—I am requested by Mr. Charles Dickens to express his regret that he cannot accept the contribution you have had the goodness to offer him for insertion in this periodical. So many manuscripts are forwarded to this office, that Mr. Dickens trusts it is only necessary to suggest to you the impossibility of its business being transacted, if a special letter of explanation were addressed to every correspondent whose proffered aid is declined. But he wishes me to convey to you the assurance,—firstly, that your favour has been honestly read, and secondly, that it is always no less a pleasure to him than it is his interest to avail himself of any contributions that are, in his judgment, suited to the requirements of *Household Words*.

The band of writers he assembled round him and inspired was certainly remarkable. There was Hollingshead, incisive, wonderful in collecting facts where abuses were concerned, and putting his facts into vigorous, downright English. His strokes always told, and a little paper of his, conceived in this spirit, entitled "Give us More Room," a simple subject, was copied at length into the *Times*, and from the *Times* into other papers. There was Moy Thomas, now the pleasant writer of the Monday "Causeries" in the *Daily News*. There was Walter Thornbury, with his extraordinary knowledge of London antiquities and curious "out-of-the-way" reading, an explorer of old "wynds" and alleys, from "Booksellers' Row" to Red Lion Square; very dainty in his taste, as his quaint bookplates, designed for him by Mr. Marks, show. He had great antiquarian knowledge, and yet, odd to say, a facile dramatic and unantiquarian style. There was also the amiable Charles Collins—our "Conductor's" son-in-law—a man of a quiet pleasant humour with a flavour of its own, and heartily liked by his friends. He had a remarkably

sweet disposition, though sorely tried by perpetual ill health. His humour was stimulated by the companionship of his father-in-law, and took somewhat the same cast. For instance, when he was appointed, during one of the great exhibitions, to the odd function—but that era of exhibitions engendered all sorts of fantastic things—of making a collection of all the existing newspapers of the kingdom, the oddities that cropped up during this duty tickled his fancy and that of his friends hugely. He noted that the smaller and more obscure the place, the grander and more commanding was the title of its organ—witness *The Skibbereen Eagle*, a name that gave him much delight. Writing he delighted in, but, by a cruel fate, it was a labour, if of love, yet accompanied by something like torture. Every idea or sentence was wrung from him, as he said, like drops of blood. Neither ideas nor words would flow. His “Cruise upon Wheels,” a record of a journey along the French roads in a gig, is a most charming travel-book, in which his quaint humour is well shown. The late Andrew Halliday was another useful writer that could be depended on to gather hard facts, and set them out when gathered in vivacious style. He enjoyed a fixed substantial salary—think of that, ye occasional “contributors”—and I have seen him arrive in his hansom with his formal list of “subjects” for treatment, which were carefully gone through, debated, and selected. He afterwards made play-writing his regular vocation, but was cut off in his prime, like many a writer. There was Parkinson and there was Professor Morley; above all, there was the always brilliant George Augustus Sala, perhaps the only writer in periodicals who writes a distinctly original style, with personality and unflagging vivacity. I have not space to dwell on his merits here, but I may at least confess to looking with a sort of wistful envy at his exquisite penmanship, that seems never to depart from one steady standard of excellence. The surprising neatness and clear picturesqueness of his calligraphy is the delight of compositors, as with humiliation I have to confess that mine is their despair. Indeed, I may make a clean breast of it and further own that on one journal of enormous circulation the men demanded, and obtained, extra pay “for setting Mr. ——’s copy.” As I write, the old *Household Words*—a title infinitely superior to *All the Year Round*—is revived by the old editor’s son, a capable, energetic, and clever man, who has pushed his way with success. One of the old guild thus writes of the new venture in the *Daily News* :—

One function of the original *Household Words*, as of its legitimate successor *All the Year Round*, has proved to be that of ushering in new claimants to a place in the world of literature and journalism. The great position enjoyed by

Dickens in the literary world, his early and intimate connection with newspaper work as a man "in the gallery," and his genial and helpful nature, attracted a crowd of aspirants around him. He was immeasurably more infested than ever was Pope by "frantic poetess" and "rhyming peer," and the "parson much bemused with beer" was assuredly not wanting. Out of this crowd of claimants he chose his "young men" with the skill of a born leader, and helped them on by tongue and pen, by shrewd counsel, and fierce "cutting" of their articles. If he had any fault, it was in the good nature which prevented him from crushing unhappy creatures, doubtless well fitted for every pursuit but that of letters; and who were induced to persevere by his mistaken kindness, to their own ultimate sorrow and discomfiture. Some had written much or little before they came to him, but the fact remains that it was under his leadership that they achieved reputation. Beneath the banner upheld by Charles Dickens and his faithful friend, the late Mr. W. H. Wills, marched a brilliant array of writers, if not quite of the Titanic proportions of the early contributors to *Fraser's Magazine*, yet noteworthy by their brilliant success in the new periodical. Mr. Wilkie Collins had previously written fiction, but his most famous work, "The Woman in White," appeared in *Household Words*. The late Mr. Charles Collins was actually egged on by "the Chief" into writing his remarkable "Eye-Witness" and other papers. Mr. Sala's "Key of the Street" unlocked for him the avenue to his successful career; and Mr. Grenville Murray spreads his wings as "The Roving Englishman," and made his mark by a fierce attack on the late Lord Stratford de Redcliffe, whom he satirised as "Sir Hector Stubble." Mr. Edmund Yates's best novel, "Black Sheep," and scores of his best articles, appeared in the journal "conducted by Charles Dickens," as did Lord Lytton's "Strange Story;" as well as "Hard Times," "Great Expectations," the "Uncommercial Traveller," and a regiment of Christmas stories by the hand of the master himself. Among the writers of poems and stories, short and long, essays and descriptions, are the well-known names of Harriet Martineau, Mrs. Gaskell, Peter Cunningham, Miss Jewsbury, John Forster, Albert Smith, James Hannay, and Mark Lemon.

The time when "the Christmas Number" had to be got ready was always one of pleasant expectancy and alacrity. It was an object for all to have a seat in "a vehicle" which travelled every road and reached the houses of a quarter of a million persons. With his usual conscientious feeling of duty to the public, he laboured hard, first, to secure a good and telling idea; and second, to work it out on the small but effective scale with which he had latterly grown unfamiliar, owing to his habit of dealing with large canvases. Hence the labour was in proportion, and at last became so irksome that he gave the place up altogether, though it must have been a serious loss of profit. *Frappez vite et frappez fort*, was the system. I remember his saying, when complaining of this tax, "I have really put as much into *Mrs. Lirriper* as would almost make a novel." He himself generally supplied a framework and a couple of short stories, and the rest was filled in by "other hands." I have myself finished two in a single number.

As the time drew near, a pleasantly welcome circular went forth to a few of the writers of the journal ; the paragraphs of which, as they exhibit his lighter touches, will be welcome. They show, too, the matter-of-fact, business-like style in which the matter was conceived and carried out.

In inviting you to contribute to our Christmas Number, I beg to send you Mr. Dickens's memorandum of the range that may be taken this year. You will see that it is a wide one.

The slight leading notion of the Number being devised with a view to placing as little restriction as possible on the fancies of my fellow-writers in it, there is again no limitation as to scene or first person or third person ; nor is any reference to the season of the year essential.

It is to be observed that the tales are not supposed to be narrated to any audience, but are supposed to be in writing. How they come to be in writing *requires no accounting for whatever*. Nothing to which they refer can have happened within seven years. If any contribution should be of a kind that would derive any force or playfulness, or suggestiveness of any sort, from the pretence that it is incomplete—that the beginning is not there, or the end, or the middle, or any other portion—the pretence will be quite consistent with the general idea of the Number.

On another anniversary the circular ran :—

Your tale may be narrated either in the first or in the third person—may be serious or droll—may be told by an individual of either sex, and of any station. It is not essential to lay the scene of action in England (tho' the tale is told in England), and no reference whatever to Christmas is desired.

The tale is supposed to be related by word of mouth to a man who has retired from the world and shut himself up moodily, gloomily, and dirtily. Generally it should have some latent bearing by implication on the absurdity of such a proceeding—on the dependence of mankind upon one another—and on the wholesome influences of the gregarious habits of humanity.

A third was to this effect :—

The tales may be in the first person or in the third, and may relate to any season or period. They may be supposed to be told to an audience or to the reader, or to be penned by the writer without knowing how they will come to light. How they come to be told at all does not require to be accounted for. If they could express some new resolution formed, some departure from an old idea or course that was not quite wholesome, it might be better for the general purpose. Yet even this is not indispensable.

The following was more elaborate :—

An English trading-ship (with passengers aboard), bound for California, is supposed to have got foul of an iceberg, and becomes a wreck. The crew and passengers, not being very many in number, and the captain being a cool man with his wits about him, one of the boats was hoisted out and some stores were got over the side into her before the ship went down. Then all hands, with a few exceptions, were got into the boat—an open one—and they got clear of the wreck, and put their trust in God.

The captain set the course and steered, and the rest rowed by spells when the

sea was smooth enough for the use of the oars. They had a sail besides. At sea in the open boat for many days and nights, with the prospect before them of being swamped by any great wave, or perishing with hunger, the people in the boat began, after a while, to be horribly dispirited. The captain remembering that the narration of stories had been attended with great success on former occasions of similar disasters, in preventing the shipwrecked persons' minds from dwelling on the horrors of their condition, proposed that such as could tell anything to the rest should tell it. So the stories are introduced.

The adventures narrated need not of necessity have happened in all cases to the people in the boat themselves. Neither does it matter whether they are told in the first or in the third person. The whole narrative of the wreck will be given by the captain to the reader in introducing the stories, also the final deliverance of the people. There are persons of both sexes in the boat. The writer of any story may suppose any sort of person—or none, if that be all—as the captain will identify him if need be. But among the wrecked there might naturally be the mate, the cook, the carpenter, the armourer (or worker in iron), the boy, the bride passenger, the bridegroom passenger, the sister passenger, the brother passenger, the mother or father passenger, or son or daughter passenger, the runaway passenger, the child passenger, the old seaman, the toughest of the crew, &c. &c.

This was the skeleton or ribs of “The Wreck of the *Golden Mary*,” which had extraordinary success, though some critics were merry on the idea of the suffering passengers having to listen to such long narratives—one adding, that he wondered that it did not precipitate the catastrophe.

Another was more general :—

Mr. Dickens is desirous that each article in the new year's number of *Household Words* shall have reference to something *new*, and I beg to ask you to assist us in producing a paper expressive of that always desirable quality.

I can give you no better hint of the idea than the roughest notion of what one or two of the titles of the papers might be : A New Country ; A New Discovery (in science, art, or social life) ; A New Lover ; A New Play, or Actor, or Actress ; A New Boy.

Your own imagination will doubtless suggest a topic or a story which would harmonise with the plan.

Yet one more :—

In order that you may be laid under as little constraint as possible, Mr. Dickens wishes to present the requirements of the number, in the following general way :—

A story of adventure—that is to say, involving some adventurous kind of interest—would be best adapted to the design. It may be a story of travel, or battle, or imprisonment, or escape, or shipwreck, or peril of any kind—peril from storm, or from being benighted or lost ; or peril from fire or water. It may relate to sea or land. It may be incidental to the life of a soldier, sailor, fisherman, miner, grave-digger, engineer, explorer, pedlar, merchant, servant of either sex, or any sort of watcher—from a man in a lighthouse, or a coastguardsman, to an ordinary night nurse. There is no necessary limitation as to the scene, whether abroad or at home ; nor as to the time, within a hundred years. Nor is it im-

portant whether the story be narrated in the first person or in the third. Nor is there any objection to its being founded on some expedition.

In connection with this matter, I may say, that nothing was more delightful than the unrestrained way in which he confided his plans about his own stories, or discussed others connected with mine ; imparting quite a dramatic interest and colour to what might, as mere business details, have been left to his deputy.

Once, in a little town in Wales, I had seen a quaint local museum, formed by an old ship captain, who had collected odds and ends of his profession, mostly worthless ; much like what is described in " Little Pedlington." The oddest feature was the garden, in which he had planted various figure-heads of vessels, Dukes of York and others, who gazed on the visitors with an extraordinary stare ; half ghastly, half grotesque. This seemed to furnish a hint for the machinery of one of his Christmas stories, and was suggested to him.

That notion of the shipbreaker's garden (he wrote, November 1865) takes my fancy strongly. If I had not been already at work upon the Christmas Number when you suggested it, I think I must have tried my hand upon it. As it is, I often revert to it, and go about and about it, and pat it into new forms, much as the buttermen in the shops (who have something of a literary air at their wooden desks) pat the butter. I have been vexed at not being able to get your story into *Dr. Marigold*. I tried it again and again, but could not adapt its length to the other requirements of the Number. Once I cut it, but was not easy afterwards, and thought it best to restore the excision and leave the whole for a regular Number. The difficulty of fitting and adapting this annual job is hardly to be imagined without trying it. For the rest, I hope you will like the Doctor—and know him at once—as he speaks for himself in the first paper and the last. Also I commend to your perusal a certain short story, headed " To be taken with a grain of salt."

I hope you are in force and spirits with your new story, and hope you noticed in the *Times* the other day that our friend — is married !

How amazing this modesty, and these excuses for not using what another would have simply said he found " unsuited to the magazine."

As I look over the records of his interest in my undeserving scribble, there comes, mingled with pain and regret for this genial, never-flagging friend, something of a little pride in having gained the interest of so true and appreciative a nature. It will be seen how he encouraged—how even grateful he appeared to be, for anything he thought good or successful ; and how patient and apologetic he was under circumstances where his good will and good nature were tried. It was so for a long period of years ; he was the same from beginning

to end ; no caprice ; steady, firm, *treu und fest*. Carlyle, in a single line, gave the truest estimate of him.

Another trait in him was his unfailing pleasure in communicating some little composition of which he was particularly pleased ; or he would tell of some remarkable story that he had been sent, or would send one of his own which he fancied hugely. It was a source, too, of pleasant, welcome surprise to find how he retained in his memory, and would quote, various and sundry of your own humbler efforts—those that had passed into his own stock associations. These generally referred to some experience or humorous adventure, or it might be some account of a dog.

After two or three years of industrious practice in short stories and essays, I had fancied I could succeed in novel-writing with a first attempt, and timidly suggested that I might “try my hand” in his weekly journal. He at once agreed, and good-naturedly had about half a volume “set up,” so as to give the production every chance in the reading. But the attempt was immature ; its waxen wings melted, and he was obliged to decline. By-and-bye I got a new pair, and, making a formal attempt in two volumes, was lucky enough to make a success.

The history of this little transaction will be found interesting, not, of course, from my own share, but as illustrating that charm of hearty good will which marked every act of his where his friends were concerned. Here also enters on the scene his faithful coadjutor and assistant, W. H. Wills ; a sterling character, practical, business-like, and yet never letting his naturally friendly temper be overcome by the stern necessities of his office. He had a vast amount of business, as may be conceived ; yet his letters, of which I have some hundreds before me now, were always playful, amusing, clever, and written in a flowing lengthy style—even to “crossing.” His sagacity was heartily appreciated by his chief. He ever appeared a most favourable specimen of the successful literary man.

At the risk of becoming more personal, I may enter a little at length on the subject of what Lamb calls the “kindly engendure” of this story—which, in truth, has some flavour of the romance of authorship. I had sent my successful two-volume venture to my friend.

MY DEAR ———,—Do not condemn me unheard (I know you are putting on the black cap). I have been silent, but only on paper ; for a fortnight after you last heard from me I was roaring with pain. The first use of my convalescence was to read your story—like a steam-engine. My impression is that it is the best novel I have read for years ; why I think so I need not tell you. I posted off with it to Dickens, whose impression of it results in this : that we

should like you to write a novel for *All the Year Round*. If you respond to that wish, it will afford me very great pleasure.

In that case, it would be necessary for you to begin at once ; for, should you make a hit with your plot, we would require to publish the first instalment in September next. The *modus operandi* I propose is this : let us have a rough sketch of your plot and characters ; Dickens would consider it, offer you suggestions for improvement if he saw fit, or condemn it, or accept it as you present it if he saw no ground for remark. In case of a negative, you would not mind, perhaps, trying another programme. I need not tell you how great an advantage it would be for you to work under so great a master of the art which your novel shows you to know the difficulties of ; and your artistic sympathies will, I know, prompt you to take full advantage of hints which he would give you, not only in the construction and conduct of your story, but in details, as you proceed with it in weekly portions.

Experience has shown us that the pre-appearance of a novel in our pages, instead of occupying the field for after-publication in volumes, gives an enormous stimulus to the issue in a complete form. We can therefore ensure you for your work, if it will fill three volumes, five hundred pounds (£500), part of which we would pay for our use of your manuscript, and part the publisher of the volumes would pay ; but we would, in case of acceptance, guarantee you £500, whatever the re-publication may fetch.

Think this over, and when your thoughts are matured, let me have them in your next letter.

This was almost thrilling to read. Every word was as inspiring as the blast of a trumpet. It will be noted how pleased the writer is at the very communication of his intelligence. And then the "pécune" ! Five hundred pounds ! The diligent magazine-writer might exclaim with one of Jerrold's characters, "Is there so much money in the world !" It was really liberal and generous.

No time was lost in setting to work. I had soon blocked out a plan—what dramatists call a *scenario*—and had, about as soon, set to work, and written a good many chapters and sent them in.

It will now be characteristic to see what pains were taken—how heads were laid together to improve and make good—all under the master's directions and inspirations—who, as he said often, always gave to the public his best labour and best work. This constancy always seemed to me wonderful. He never grew fagged or careless, or allowed his work to be distasteful to him. This is a most natural feeling, and comes with success ; and there is a tendency to "scamp" work when the necessity for work is less. Mr. Thackeray confessed to this feeling—in the days when he became *recherché*—and found a sort of distaste to his work almost impossible to surmount.

The first questions started on this great business came from my old friend the sub-editor, the master's excellent auxiliary. It will be seen how staunch he was, and true to both interests—that of his journal and that of the writer.

I am nearly as anxious as you are about your story. I may tell you that my judgment is in favour of it, so far as it has gone ; but Dickens, while never wholly losing sight of the main end, object, and purpose of the story, often condemns one because its details are ill done. He takes such infinite pains with the smallest touches of his *own* word-pictures, that he gets impatient and disgusted with repetitions of bad-writing and carelessness (often showing want of respect for, as well as ignorance of, the commonest principles of art). I, perhaps, sin too much on the other side. I say that the *general* public—whom we address in our large circulation—are rather insensible than otherwise to literary grace and correctness ; that they are often intensely excited by incidents conveyed to their minds in the worst grammar.

Mind, I only make these remarks for your guidance. My advice to you is, write for all your proofs, go over them very carefully. Take out as many Carlyleisms as you can see (your writing abounds with them), make clear that which is here and there obscure without a reader's consideration and retracing of the text—a labour which novel-readers especially hate ; in short, put as high a polish on your details as you can, and I may almost *promise* you success. Dickens is vagabondising at present, and won't be back for 10 days ; get all ready by that time.

It is not impossible that we may have to call upon you suddenly to let us commence the story in a week or two ; but it may be deferred for a year. At all events, I can promise you a decision on all points when C. D. shows up.

I find a fault in your other novel which is creeping into Miss — : a want of earnestness ; a Thackerayish pretence of indifference, which you do not feel, to the stronger emotions and statements of your characters. If you excite the emotions of your readers, and convey the idea that *you* feel a lofty contempt for emotion in general, *they* feel sold, and will hate your want of taking them in.

I don't say a word in praise of your new venture, though I think a great deal. I want you and your writing to make a hit, not only with C. D. but with the public ; and what I have said (which will make you detest me at least till after church-time on Sunday) *may* be a small contribution towards that object, which I do most earnestly desire. About Monday, when your heart is open to forgiveness of sins like mine (or before it prove less obdurate), let me hear from you.

One other thing. You see Sala's story lies chiefly in Paris. Could you not adopt my suggestion of giving your story its natural progression, and postponing chapter the first to its natural place in the story ? My conviction is that you would make an improvement thereby in all respects.

After many debates, it was determined to attempt the venture.

Next let me convey to you the intelligence (wrote our chief), that I resolve to launch it, fully confiding in your conviction of the power of the story. On all business points Wills will communicate with you.

The only suggestion I have to make as to the MS. in hand and type is that — wants relief. It is a disagreeable character, as you mean it to be, and I should be afraid to do so much with him, if the case were mine, without taking the taste of him here and there out of the reader's mouth. It is remarkable that, if you do not administer a disagreeable character carefully, the public have a decided tendency to think that the *story* is disagreeable, and not merely the fictitious person.

What do you think of this title — ? It is a good one in itself, and would express the eldest sister's pursuit, and, glanced at now and then in the text, would hold the reader in suspense. Let me know your opinion as to the title. I need not assure you that the greatest care will be taken of you here, and that we shall make you as thoroughly well and widely known as we possibly can.

Now, this was all encouraging and cordial to a degree. Yet, I seem to see the editor here, more or less ; and friendly and good-natured as these assurances were, in the case of an acquiescence, it will be seen what a difference there was in his tone as time went on, and he was good enough to have a "liking," as it is called, for the writer ; even the slightly authoritative air that is here disappeared. I frankly confess that, having met innumerable men, and having had dealings with innumerable men, I never met one with an approach to his genuine, unaffected, unchanging kindness, or one that ever found so sunshiny a pleasure in doing one a kindness. I cannot call to mind that any request I ever made to him was ungranted, or left without an attempt to grant it.

The letter just quoted conveys a most precious lesson to the novel-writer—whose craft, indeed, requires many lessons. Having written nearly twenty novels myself, I may speak with a little experience, and frankly own that it was not till I had passed my dozenth that I began to learn some few principles of the art ; having written, as so many do, "as the spirit moved," or by fancied inspiration.

The allusion to the "bold advertisement" was, indeed, handsomely carried out. Few would have such advantages of publicity as one writing a novel for *All the Year Round* in those days. There was the *prestige* of association with the master, while the condition in which your work was brought before the public was truly effective.

All this happily settled, the affair was duly announced. No expense was spared. Vivid yellow posters, six or seven feet long, proclaimed the name of the new story in black brilliant characters on every blank wall and hoarding in the kingdom ; while smaller and more convenient sized proclamations, in quarto as it were, told this tale in more modest way. So that, if there was really any light at all, it was not under a bushel. I had a pride in, and fondness for, these testimonials, and have religiously preserved all that dealt with my own efforts ; a kind of literature, as may be conceived, of a bulky sort, and filling great space as they accumulated. When debating effectual titles for these and other writings, I recall his taking me to his room without telling me what he had selected, and, by way of test or surprise, exhibiting one of these gigantic proclamations stretched at full length across the floor of the room. "What do you think ?" he would ask. "You must know," he would add, his eye beginning to twinkle with merriment, "that when Wills corrects the proofs of these things, he has to go on his knees, with a brush and pot of

paint beside him!" The cost of this system of advertising was enormous in the year, but everything was done magnificently at "the office."

A little later I was informed that—

The next number we make up will contain the first part of your story. I like what you have done extremely. But I think the story flags at —'s "chaff." There is too much of it. A few pregnant hits at — would do all you want better. Again, the C— party requires, I think, the exciseman up to the quadrille, where the real business of the evening begins. You see, in publishing hebdomadally, any kind of alternation is very dangerous. One must hit, not only hard, but quick.

Please look well to the passage revealing the acceptance of F— V—, and overthrow of H—, in the bedroom, after the party. This is a strong situation, and, to my mind, is confusedly expressed—in fact, can only be vaguely guessed at by the reader.

More criticism! Everything goes on well so far; but I tell you what we all yearn for—some show of *tenderness* from somebody: the little glimpse of B—, a number or two ago, with his little touch of humour-feeling, was refreshing in the highest degree. The characters seem to be all playing at chess—uncommonly well, mind you—but they neither do nor say anything sympathetic.

As the story advanced the councils multiplied, as well as the suggestions and improvements. Experiments even were made in particular directions, and an episode was furnished "to see how it would look in print;" sheets being "set up" in this way regardless of cost, and dismissed as unsatisfactory. All this was laborious and troublesome, but, as was said, the experiment was worth making, and few sensible writers but would have welcomed the opportunity of learning their craft under such a teacher. It would be impossible to describe the fertility of his resources, the ingenuity exhibited, the pains and thought he gave to the matter. Under such auspices—and it was admitted that I was a willing pupil, with equal readiness to adopt and to carry out all that was suggested—the work benefited, it need hardly be said.

"Is it worth your while," wrote my sub-editor, "to be bothered with a second scrawl merely to let me say how admirable I think it. Tender, true, and too pathetic even for an old hack waiting for his dinner to read with dry eyes. My first mouthful would have choked me if I had not written this."

The end gained was satisfactory to all concerned. The work was successful, passed through several editions, and still sells. The copyright was disposed of for a sum nearly equal to what was allotted to me. Indeed, before it was concluded, the following pleasant communication, as full of sensible advice as it was agreeable, set me to work again. One curious evidence of its success was the fact that

a firm of perfumers in Bond Street named a new perfume after the story, and this fragrance has much favour among the ladies, and is largely sold to this hour.

To Pæan ! I congratulate you on being at last able to flourish the word *Finis*. I have not yet read a line of your ending, and this omission will give you a better relish for what I am going to say : dictated solely by the "merits" already developed, Dickens's answer to the wish you express at the end of your letter was a glad and eager "Yes ;" in which I heartily and cordially concurred, as you may guess. Let your next novel be for us. We shall want it in from twelve to eighteen months' time ; and, if I may venture some advice, let me urge upon you to employ at least a quarter of it in constructing the skeleton of it from the end of your story, or modifying any little detail in the beginning of it—if you would set yourself the task of at least seeing land before you plunge into your voyage, with no chance of veering, or "backing or filling," or shortening sail.

I am sure you have a great chance before you, if you will only give your powers their full swing ; especially if you will let us see a *little* of the good side of human nature.

Ever very faithfully yours,
W. H. W.

I have many proof-sheets by me, corrected by his own hand in the most painstaking and elaborate way. The way he used to scatter his bright touches over the whole, the sparkling word of his own that he would insert here and there, gave a surprising point and light. The finish, too, that he imparted was wonderful ; and the "dashes," stops, shiftings, omissions, were all valuable lessons for writers.

On another occasion, when he did not "see," as he says, the point of another attempt—and, indeed, there was not much—he excuses himself in this fashion for not using it :

Don't hate me more than you can help, when I say I have been reading in "Sixpenny Shakespeare," and that I don't *see* it. I don't think this joke is worth the great ingenuity, and I don't think the public would take it. "Wills and Will-making" most excellent. I have placed it in two parts already. It is capital.

Once again, don't hate me more than you can help, and your Petitioner will ever pray. (I don't know what Petitioners pray for.) Ever yours, C. D.

So also, when an unhappy monkey, trained to ride in a circus, offered a tempting subject for a paper which I had sent to him, he answers in the same spirit :

I am afraid the monkey is anticipated. It has been exceedingly well done by Buckland in "Land and Water," and would be the day after the Fair. I was going to place him to-day, but in the mean time caught sight of Buckland's paper, which has been extensively copied both in weekly and country journals.

Indeed, the pleasant ardour with which he followed the course of a story, anticipated its coming, debated its name, and helped its writer over various stiles, and even extricated him from bogs, was

all in the same spirit. His aid as to the name and conduct of the story was, it may be conceived, invaluable. Many and earnest were the consultations upon this matter of naming. No one had a nicer ear as to what would "hit" or suit the taste of the town.

I am glad to hear that the story is so far advanced now that you think well of it, for I have no doubt that you are right. I don't like either of your names, for the reason that they don't seem to me solidly earnest enough for such a story. But give me a little time to think of another, and I flatter myself that I may suggest a good one.

And again—

I think the plan of the story very promising, and suggestive of a remarkably good, new, and strong interest. What do you think of the pursuing relative dying at last *of the same disorder as the Baronet's daughter*, and under such circumstances as to make out the case of the clergyman's daughter and clear up the story? As, for example, *suppose her husband himself does almost the same thing in going for help when the man is dying*. I think I see a fine story here. As to the name. No, certainly not. "What could she do?" No again. "What will he do with it?" "Can he forgive her?" "Put yourself in his place." Remember these titles.

And again—

July, 1868.

"O where! O where! is the rest of Tom Butler?" A hasty word. I prefer — (without the article). I cannot possibly answer the question Mr. — does me the honour to propose, without knowing what length of story is meant.

I answer your letter to myself. It is perfectly understood between us that you write the long serial story next after —. That is a positive engagement. When I told — to write to you respecting a shorter story meanwhile, I meant that to be quite apart from, and over and above, the aforesaid long one. May I look at the chapters you speak of on Decoration?

I am in a brilliant condition, thank God. Rest, and a little care immediately, *unshook* the Railway shaking.

I don't quite understand from your kind note (forwarded here this morning) whether — purposes to write these papers or whether he suggests them to you. In either case, I shall be delighted to have them. It is necessary that they should appear under separate headings, each with its own title, as we have already three running titles. Your story — is going on famously, and I think will make a hit. I had a letter from W— C— yesterday, much interested in perceiving your idea, and in following your working of it out. We purpose being in — on Thursday, and going on that afternoon. I hope we shall find you in readiness to go along with us.

1865.

Your hint that you are getting on with your story, and liked it, was more than golden intelligence to me in foreign parts. The intensity of the heat in Paris and in the Provinces was such that I found nothing else so refreshing in the course of my rambles.

Make yourself quite easy. There is not the slightest need to hurry, and you can take your own time. I have a story in two parts still to place in Numbers not yet made up. Until Wednesday, and always.

So again—

It strikes me that a quaintly expressive title for such a book would be "The ——." What do you think of it?

The "eminent literary personage," as he called him, had now other ambitions—trying his hand at a short dramatic piece. He took charge of it, and sent it to his friend Webster. As it did not suit—others did, in due time—he good-naturedly broke the fall with the following :

The play goes very glibly, and merrily, and smoothly, but I make so bold as to say you can write a much better one. The most characteristic part in it is much too like Compton in "The Unequal Match." And the best scene in it, where he urges his wife to go away, is so excessively dangerous, that I think the chances would be very many to one against an audience's acceptance of it. Because, however drolly the situation is presented, the fact is not to be got over that the lady seriously supposes her husband to be in league with another man.

With some humiliation I must own to trying the tolerance of this most amiable of men with various failures and sad carelessness on many occasions. His printer would grumble at the perfunctory style in which the copy was presented, and even in print it was sometimes difficult to put matters in shape.

My difficulty (he wrote) about your story has been a report from the Printer that the copy of some part of another story had got mixed with it, and it was impossible to make sense. You were then just gone. I waited until you should have leisure—now that I hear from you, I tell you only I have waited—and ask : *Is* the story made straight, and *is* it at the Printer's? Reply, reply, reply, as Bishop's duett says. Reply also to this. How long is it?

"Waited until you should have leisure!" There was almost unlimited indulgence in the matter of changing and revising printed pages, condemned at his author's suggestion—new bits introduced here and there. He had a pleasant joke in this trying behaviour, and vowed that I had introduced a new term in the Printing-House "Chapel," a thing unknown for centuries in that most conservative of professions. These introduced columns and half-columns were denominated, to distinguish them from the regular narrative, as "Random." And a number being brought by the foreman one day, and asking what this was, he was told that "they were *Mr. ——'s Randoms*." The delight he felt in this seemed to compensate for any annoyance. I see the exuberant twinkle in his bright eye, and his hearty relish. At last, however, his patience would give way :

For my sake, if not for heaven's (he would write), do, I entreat you, look over your manuscript before sending it to the printer. And again, please keep on abrupt transitions into the present tense your critical eye. Tom Butler, in type, is just brought in. I will write to you of him to-morrow or Sunday.

How gentle was this !

Once, however, and only once, he delivered himself with a severity that I own was richly deserved. Two novels were being actually written by "my facile pen" at the same moment, much as a bare-backed rider, or rider of barebacks, would ride the same number of horses round the circus. At the same time we were preparing for a long serial in his journal. "You make me very uneasy," he began, "on the subject of your new story here by undertaking such an impossible amount of fiction at one time. As far as I know the art we both pursue, it cannot be reasonably carried on in this way. I cannot forbear representing this to you, in the hope that it may induce you to take a little more into account the necessity of care in preparation, and some self-denial in the quantity done. I am quite sure I write as much in your interest as my own." How easily propitiated he was will be seen when, on a mere undertaking to be careful, he writes that—"Your explanation is (as it would be, *being yours*) manly and honest, and I am both satisfied and hopeful." Nay, some weeks later he recurred to the matter in this strain :

I am very sorry I was not at home. It gives me the greatest pleasure to receive such good tidings of the new story, and I shall enter upon its perusal in proof with the brightest appreciation. Will you send as much of it as you can spare to the office.

SCIENCE NOTES.

THE CELESTIAL ORIGIN OF HAILSTONES.

A RUSSIAN philosopher, M. Shevedoff, has ventured upon a bold hypothesis concerning the origin of hail. He has carefully investigated the subject, and concludes that its origin is similar to that of the iron and other mineral fragments that are captured by the gravitation of our world in its way through space. Having no knowledge of the Russian language, I cannot give the details of his arguments, but the conclusion does not startle me at all, seeing that I have already satisfied myself, and, I believe, many of the readers of my essay on "The Fuel of the Sun," that the water of all our oceans is of cosmical origin; that the whole of space contains aqueous vapour, a portion of which is condensed upon our globe, and a proportionate quantity is attached to all the other orbs of space.

That this cosmical water should be liable to solidify in space is rendered very probable, or even certain, by some curious experiments recently made by Mr. Carnelly; experiments that I have hitherto abstained from describing in these Notes until further research confirmed them. They appear now to have been confirmed by Mr. Herschel, and further evidence is probably forthcoming.

If Mr. Carnelly is right, the water which I maintain must be diffused through space can only exist in its more vacuous regions in two states, viz., solid and gaseous; its liquid state must there be impossible. Ice could not melt there, it could only evaporate, and vapour could not condense into water, but only into ice. Therefore, if any region of space were supersaturated, it would become a hail-stone region.

But I must go no further into this subject, lest it should drag me into a new theory of comets with tails formed by the electric induction and discharge between solid particles of cosmical water, consequent upon the nucleus being intensely charged by its rapid

crossing of the lines of force radiating from the sun. I have already supposed this to be the case with other particles of solid meteoric matter, and thus have accounted for the wondrous whirling of the comet's tail as its head sweeps round in perihelion. This whirling with a velocity so far exceeding that of any of the planetary movements is the *pons asinorum* of all cometary hypotheses.

The most serious barrier to M. Shevedoff's theory is the heat that must be generated when these hailstones strike our atmosphere, and their difficulty in surviving it as hailstones, even in spite of the cooling action of their surface evaporation.

THE PLANET VULCAN.

IN 1859 M. Le Verrier announced the results of his calculations concerning the course of the planet Mercury, which he found to be subject to certain perturbations, i.e., deviations from the orbit in which it should travel if only moved by the gravitation of the sun and its own momentum. These perturbations were in excess of the possible disturbing influence of Venus, unless that planet had a mass at least one-tenth greater than is attributed to it. Another explanation, far more probable and better fitting to the facts, was that which M. Le Verrier adopted, viz., that there exists a hitherto unseen and unknown planet moving in an orbit still nearer to the sun than that of Mercury.

On March 26 of the same year M. Lescarbault, of Orgières, saw a black spot travel across the sun, and thought it must be a planet, as its appearance and rate of movement proved it to be no ordinary sun-spot.

Le Verrier visited M. Lescarbault, compared the time and direction of the transit with his own calculations of the orbit of the theoretical planet, and was satisfied that the black spot was the planet passing directly between the sun and the earth. He named it "Vulcan," on account of its warm quarters, and calculated its period of revolution, or its length of year, to be 19 days 17 hours, and the inclination of its orbit to that of our earth to be $12^{\circ} 10'$; besides other elements that I need not specify here.

Supposing all these figures to be correct, other transits should occur at dates not difficult to predict. Telescopes were accordingly directed to the sun at these periods, but none of the expected transits were observed. Astronomers became sceptical, and finally rejected the new planet altogether. Thus Vulcan was kicked out of heaven a

second time, though not on this occasion by his father, for Le Verrier seemed still to cling to his second planet, and I suspect that some of the irritability he displayed on a well-known occasion was attributable to a gnawing vexation at its non-recognition and his inability to prove its existence.

The reason why such a planet would not be visible at night like the other planets, is that, being so near to the sun, it must be out-dazzled by his glare when above the horizon, and would descend with him before nightfall. Mercury is but rarely visible for the same reasons.

If, however, we could shut out the sunlight during the daytime, such a planet might be visible. The moon acts as such a shutter during a total eclipse, and thus the search for an intra-Mercurial planet is one of the interesting objects of eclipse expeditions.

The United States Naval Observatory has just issued a series of reports of the observations of the solar eclipse of July 29, 1878. It is a noble quarto volume of 430 pages, with 60 full-page plates and many wood engravings. This and the other publications of the United States Observatory are circulated among scientific men with a liberality unparalleled by that of any European Government. I have a number of volumes which have been sent to me carriage free to London. Others have the same, and I take this opportunity to publicly express my thanks and my admiration of the cosmopolitan and truly scientific spirit that prompts this liberality.

Among other observations recorded are those which were directed to the detection of the intra-Mercurial planet by the late Professor James C. Watson and others. On the first announcement of Watson's results, his conclusions were regarded very distrustfully; but upon reading all the reports in reference to this subject, I am of opinion that those who disputed the accuracy of Professor Watson's conclusions have done so upon insufficient grounds. It is true that Newcombe, Wheeler, and Hess failed to see what Watson saw, but such negative evidence is of little value in a case where only two or three minutes were devoted to "sweeping" the region around the sun with a telescope, and doing this under circumstances of great excitement. Hess admits that his telescope was too small, that he "looked for the stars Delta, Gamma, and Eta Cancræ, but could see neither." If such negative evidence is to be accepted, it would disprove the existence of these stars. On the other hand, the power of Wheeler's telescope was, as he himself says, "too high for covering much territory in the time available."

Professor Newcombe had only time to sweep the sky eastward

of the sun, but both the strange red stars described by Watson were on the west, and he discovered these after sweeping the east in vain.

Watson's search was systematic; it commenced before totality and continued during its whole period. He directed all his attention to this subject, the others did other work besides, and made this secondary. The idea that he mistook Theta Cancri for the object in question is, I think, a purely gratuitous assumption, for he says, "I saw both it and θ Cancri, and it was fully a magnitude brighter than the latter." It was redder than the known stars. He is less positive concerning the second object.

The independent observations of Mr. Lewis Swift fully confirm those of Professor Watson. He says, "Almost the first sweep made to the westward of the sun, I ran across two stars presenting a very singular appearance, each having a round red disc and being free from twinkling. I at once resolved to observe these with great care." He then describes the details of his observations, which I have not space to quote; but I may mention that he, like Watson, saw both Theta Cancri and the disputed star near to each other. Besides this, he says that "on the morning of the 10th instant I observed Theta robbed of the companion I saw during the eclipsed sun."

It is possible that, after all, Vulcan will be reinstated, and that he will be found to be a very small planet, on which such metals as lead and tin, if existing there, would form rivers and lakes that would freeze in winter and thaw in summer, while arsenic, antimony, and cadmium would evaporate in the daytime and condense in metallic dew-drops at night. The next eclipse, of May 17, 1882, may bring us further tidings of it; but the observers must look very sharply, as they will have but a minute and a quarter of available darkness even in the best positions attainable.

THE SUN'S CORONA.

THE American Reports of which I have just spoken form a very timely supplement to the 41st volume of the Memoirs of the Royal Astronomical Society, a quarto volume of above 800 pages, abundantly illustrated with excellent plates and woodcuts. This is a collection of the records of observations made during various solar eclipses up to 1878. The matter is well arranged for reference, and the whole work is admirably done by Mr. Cowper Ranyard.

Those who are unacquainted with the literature of solar eclipses,

and who merely think of an eclipse of the sun as a temporary obscuration of daylight, may be surprised at the contents of these volumes. Every chapter in Mr. Ranyard's work treats of a distinct subject, or special object of observation, research, and speculation ; and there are 44 of these chapters. Considering that most of these relate to the phenomena of totality, and that the totality lasts but one, two, or three minutes, and that this is a period of intense excitement, the necessity for organisation, for division of labour, and the demand for self-restraint on the part of all who would like to see everything, but have undertaken only to observe one or two, are evident.

The great mystery is the corona. Instead of all the glories of the sun being hidden when it is covered by the opaque veil of the moon, a new effulgence comes in sight. On the edge of the sun are fiery mountains, 10,000, 50,000, 100,000 miles high ; but these may now be seen without an eclipse by the aid of the spectroscope. Not so the corona, which is a brilliant something surrounding the sun, and extending unequally to a vast distance beyond his surface.

It cannot be an atmosphere of anything like gas or vapour such as we are acquainted with, seeing that such an atmosphere, having any such extent, would be condensed by its own pressure to a density far exceeding that of the body of the sun itself. Mr. Lockyer's idea, to which he clung so tenaciously for so long, that it is due to the illumination of our atmosphere by the sunlight behind the moon, has been both physically and mathematically refuted.

Twelve years ago I ventured upon a connected explanation of this and other solar phenomena, by showing, first, that the sun must be mainly a gaseous body, and that planetary reaction must give its nucleus a reeling eccentric motion that must stir up mighty vortices in its greater gaseous envelope ; that the vapours dragged down by these vortices must be dissociated into their primary elements, and these elements, when stirred up again to cooler heights, must recombine with tremendous energy, thus forming, first the spots, then the prominences ; that these eruptions must project to vast distances the metallic vapours surrounding the sun, and such erupted vapours would condense as fiery metallic hail, thrown outward from the sun, and some returning ; but all shining brilliantly either by their own incandescence or the solar light they must reflect.

This ejected and returning matter would be hidden by daylight, as the stars are, but must become visible during an eclipse, and form a veritable corona that should not be a mere regular halo but an irregular streaky radiance.

At the time when I wrote "The Fuel of the Sun," this question of irregularity and filamentous appearance of the corona was disputed, and Mr. Lockyer still contended for its halo-like uniformity. Now there can be no further question on this point. Eye observation and photographs agree in proving its extreme irregularity, its lateral radial streams with rifts of darkness between them, and show distinct paraboloid contours, as of streams poured upwards and returning like the jets of a fountain.

Every successive record of a new eclipse brings out new features more and more distinctly, and the polariscope proves the existence of solid reflecting particles. The American plates display an extraordinary extension in two directions, closely corresponding with the region of major sun-spots and prominences.

I endeavoured to prove that some of the solar ejections extend beyond the corona, and that if we could see all, we should see the zodiacal light as a continuation of the corona. This was a sumptuous venture, but it followed so necessarily from what I received to be the primary condition of solar existence, that I was compelled to state it or give up the main argument.

Some of the American astronomers adopted the best possible means of testing this hypothesis, by observing the eclipse from a great elevation in a latitude where the zodiacal light is seen at its best. At great personal inconvenience, and in spite of very severe and dangerous suffering from mountain sickness, they erected an observatory on Pike's Peak, Colorado, 14,000 feet high. Professor Langley there saw two great coronal wings, one of them extending to a distance of *twelve solar diameters*, or more than 10 million miles from the sun, and he adds, "the twelve diameters through which I traced it under these circumstances, I feel great confidence in saying *were but a portion of its extent*." The italics are Professor Langley's; his chief reason for attributing this greater extent was, that he had so exposed his eye that he was unable to follow up the fading nebula so far as he would otherwise have done.

This brings the corona close upon the known limits of the zodiacal light, and what is specially to be remarked, the outstretching corresponds in direction to the long axis of the lenticular figure of the zodiacal light. The fear of extending this note too far, and boring my readers with my own speculations, prevents me from quoting corroborative testimony by other American observers of this interesting eclipse.

THE ENDOWMENT OF RESEARCH.

THE publication and circulation of these American reports suggests a note on the above subject which I should otherwise avoid, as it is just now too much associated with personalities. Everybody admits that the Governments of civilised countries should aid scientific research, if it can be done effectually without opening doors to jobbery. The difficulty is serious. It is like the parochial distribution of coals and blankets; they too often go, not to those who most deserve them, but to the most persistent and skilful of professional beggars.

But there is an old-fashioned sort of endowment that might safely be revived. Formerly, when an author proposed to publish a book, he sought a patron and obtained subscribers, who by paying partly in advance, or promising reliable payment, enabled him to print the work without risk, or even with certainty of remunerative profit. Such works as the splendid volumes of Gould, illustrated by Wolff, were thus produced quite lately. Gould could not have made his journeys, nor stuffed his birds, nor have produced these monuments of science (the subscription price of some was as much as £100 per volume), without such aid.

The publication of the results of researches in pure science, or of purely scientific essays, does not pay. Neither author, compiler, editor, nor publisher could afford to bring out such works as those published and distributed by the United States Naval Observatory unless he were a self-sacrificing millionaire, which does not happen to be the condition of all scientific workers.

If aid were given for such publication of original work, the endowment being paid to the writer, and the volumes distributed to students either gratuitously or at a small nominal cost, both the building up of science and the distribution of scientific knowledge would be promoted simultaneously.

Usually, until a man dies, we have no means of knowing what he has done, his work having been dropped about in the form of contributions to various societies and magazines. Sometimes these contributions are collected, but too often they are forgotten. If he were judiciously assisted in collecting and epitomising them during his lifetime, the work might be well done, and a decent acknowledgment afforded by his country, which he might accept with as much dignity as ex-cabinet ministers, retired generals, and other public servants accept their pensions or allowances.

AN OPTICAL EXPERIMENT FOR "CONSTANT READERS."

IN the course of some recent work in editing Tourist Handbooks, I have used "Clarendon" type for the names of places. The object of the thick type in this case is to render the names more conspicuous for the purpose of reference; but I have incidentally observed that I can read these names more easily than ordinary type of the same size, i.e. occupying the same space for a given number of letters. This is a subject of some importance in these days of hard reading. The German oculists have condemned their national characters, and are advocating the use of Roman letters in order to save the eyesight of readers.

Messrs. Chatto & Windus have kindly consented to allow this Note to serve as an experiment on the subject. If the reader will take the trouble to count the number of letters in each line of this and the other pages, he will find that the quantity of matter printed is the same in each. He may then make a few comparative experiments on the reading of each at certain distances, with and without spectacles, &c., and thus decide for himself whether the thick type is as advantageous as I believe it to be.

Everybody knows the difference between reading large type and small type, but large type is a luxury that costs additional pages. My object is to obtain the maximum of legibility with any given cost of paper and printing.

Besides superior legibility, there is another, though minor, advantage obtained by the use of the thick type. The paper being more covered, it presents less of the white surface, and consequently there is less of the glare that is so fatiguing to the eyes of continuous readers. Some oculists have recommended an inversion of our usual method of printing, i.e. the use of white letters on a black ground. This would probably be advantageous, but there are considerable typographical difficulties in carrying it out.

The reform which I advocate demands the consumption of a little more ink, but so little as to be unworthy of notice; and I think it probable that this little difference of cost would be quite compensated by the greater durability of the thick type.

Hard readers will, I think, agree with me in attributing much of the headache and oppression which follows hard study to the mere optical effort of reading. This is especially evident to those who have enjoyed the luxury of handing to a good reader the book that has become fatiguing, then shutting the eyes, and exerting only the mental effort of following the subject.

THE SUICIDE OF BACTERIA.

LIONS and tigers, cobras, scorpions, and rattlesnakes, are troublesome neighbours: they annually destroy a goodly number of the lords and ladies of creation, both black and white; but those omnipresent little beasts or vegetables—whichever you prefer to call them—the *bacteria*, are incomparably more pernicious and destructive. It is therefore very satisfactory to learn that they are largely addicted to suicide.

In all solutions containing them, a time arrives when they cease to increase and multiply; and Herr Wernich, following up the investigations of Baumann and Nencki, has made some researches for the purpose of ascertaining the cause of this. It appears that the changes they effect in the way of putrefaction and morbid organic disturbances produce a poison that kills the poisoners.

Wernich added mature products of putrefaction to meat extracts in the course of putrefaction, and found that the bacteria were more or less destroyed thereby, and that even very minute quantities diminished their activity.

He considers that the same occurs in the course of the many diseases, such as measles, small-pox, scarlet and relapsing fevers, usually regarded as caused by bacteria. The regular course of these diseases, and their maturity and disappearance at fixed periods, he attributes to the development and suicide of these pests, which, after reaching a certain fixed stage of development, are poisoned by the products generated by themselves, the poison acting in the same manner as the analogous products which he introduced amidst the colonies that were flourishing in his decomposing meat extracts.

MISSING LINKS.

THESE are continually turning up, and this is not at all surprising when we reflect upon the fact that geological research has extended over but a very small fraction of the surface of the earth. I shall probably be near the truth in stating that about 80 or 85 per cent. of the species of fossil animals at present known are due to discoveries made on this little island, which is the undisputed fatherland of geology.

If we look at a map of the world, and note how small an area this comprises, and then consider that our geological "finds" have been mainly drawn from mining, quarrying, railway cutting, and other

industrial scratchings of a very small portion of the surface of this small island, it is evident that much remains concealed.

Those who are disappointed because we have found no connecting link between man and monkeys, must remember that those tropical countries where "our poor relations" abound, and in which man appears to have originated, are at present geologically unexplored.

Mr. Pengelly has been engaged during above fifteen years in exploring one cavern at Torquay, where his researches have brought forth remains of primitive men of whom we have no historic nor traditional record. These men lived in company with animals, some now extinct, others of whose existence on this island we have no more record than of the cave-savages, who were doubtless emigrants from the south when Britain was connected with the European continent.

What may we not discover when the land of the gorilla, that of the chimpanzee, and that of the ourang-outang are similarly explored!

Not long ago, the gap between birds and reptiles seemed a very wide one, but now it is so completely bridged across that Professor Huxley proposes to class them together as a single section of the vertebrated animals, and give them the name of *Suuropsids*.

The connecting link was at first only one animal, the Archæopteryx, a bird with teeth, or a reptile with wings and feathers. Now the Archæopteryx, instead of being the name of a single species, has been forced into a wider signification; it is the title of a genus of which there are several species, distinguished by a second or sur-name, as *Archæopteryx macrura*, &c. Some of the recently discovered species are no larger than pigeons, others are veritable dragons, especially those found in that land of big things, the United States.

METEORIC ORGANISMS.

SIR WILLIAM THOMPSON'S meteoric "moss-grown fragment" from another world has been brought forth again very circumstantially by Dr. Otto Kahn, who has published a splendid quarto volume, with plates from micro-photographs, showing, as he supposes, the existence of fossil fragments of various sponges, and of corals and other radiated animals, some corresponding to terrestrial genera and others quite new. All of these he has found in meteorites, and therefore infers that they are fragments of a world like ours.

But these indications of cellular and radial structure discoverable by the microscope in sections of minerals are very deceptive and have deceived many. I was in Edinburgh during the great

controversy and lawsuit concerning the Torbane Hill mineral or coal. If coal, it belonged to the lessee of the mines ; if not coal, to the landlord: and thus a valuable property depended upon a definition.

It burned like coal, but was otherwise like a highly bituminous shale, and witnesses were summoned from the great universities of nearly all Europe ; some marshalled as coalites, others as shalors, and they were to give their conflicting scientific evidence on a trial that promised to be a forensic gold mine. The controversy raged outside before the trial commenced.

The coalites (who, according to George Wilson, all pronounced bitumen with accent on first syllable) relied greatly on the microscope, which they asserted revealed organic structure or vegetable cells, proving that it came under the general definition of coal as fossil vegetation.

The faction of shalors (who pronounced bitumen with accent on second syllable) denied this, and asserted the substance to be a porous rock saturated with bituminous matter.

I was infected with the general rabies, and made some imitations of the cellular tissue by stirring powdered pipe-clay with melted resin and leaving it to cool and harden. This, when sliced, showed under the microscope alternate opaque and transparent particles, like the alleged cellular tissue of the disputed mineral.

This appears to be the case with the supposed microscopic organisms of the meteorites, which contain transparent crystals, some of them acicular and radiating, others irregularly distributed, and these alternating with the opaque matter of the stone, present the structural appearances shown by the thin sections.

M. Meunier has proved this by fusing together similar materials to those of the meteorites, and examining the mixture in the same manner as Dr. Kahn did.

As regards the Torbane mineral controversy, I should add the dramatic finale. After all the witnesses were assembled in their various hotels, and all primed with profound argument and ready to explode, the trial commenced amid breathless scientific expectation ; when the judge simply called a few colliers and asked them what they called the substance in question, and what name it bore when the lease was granted. They all answered "coal," and the judge therefore decreed that such it was for all the purposes of the contract, whatever the host of British and foreign savans might on any other ground please to call it.

The commercial decision depended upon the commercial name. The scientific witnesses returned home after a pleasant excursion, the expenses of which were paid by the respective litigants.

A SIMPLE BUT QUESTIONABLE ANÆSTHETIC. !

WHEN I was a youngster, I read an account of a device which enables a diver to remain under water much longer than is otherwise possible. It is simply to make a number of very deep and rapid inspirations before plunging. I repeated the experiment successfully in a swimming bath, and then continued the experiments by trying how long I could hold my breath out of water.

I found that the rapid inspirations produced a sort of intoxication, similar to the effect of nitrous oxide ; and on one occasion I found myself lying down and surrounded by anxious friends, having just recovered from a swoon, or fit, as supposed by them. In answer to their inquiries, I merely replied that I felt a curious sensation between my shoulders. I had carried my respiratory experiments so far as to become quite insensible, and had fallen heavily against the edge of an iron wheel, but felt only a sensation of warmth where a very severe bruise was inflicted. After this my experiments were discontinued.

I am reminded of them by the recent publication, in America, of the results of some similar experiments, showing that by thus making about a hundred inspirations in a minute, teeth may be extracted without any sensation of pain. Dr. Lee read a paper on the subject at a medical society in Philadelphia, and describes the physiological effect as a sort of hypnotism resulting from modification of the cerebral circulation.

Dr. Bonwill, a dentist in Philadelphia, has practically applied it as a means of anæsthesia in his profession, and Drs. Hewson and Garnetson have done the same.

As many people are afraid of chloroform or nitrous oxide, they may possibly be induced to try this as a substitute, but the recollection of my own experience suggests the conclusion that it is quite as dangerous as either. For more than twelve months after the fall I suffered occasional attacks of giddiness, and have had to stop and hold to iron railings in the streets to escape falling. Gradually these symptoms passed away. I was probably on the brink of apoplexy ; and others who are more susceptible might easily overstep it by the use of this apparently simple method of anæsthesia.

W. MATTIEU WILLIAMS.

TABLE TALK.

IT is to be hoped, for more reasons than one, that the outbreak of small-pox with which London appears to be menaced, will be averted. If matters become really serious, it is difficult to see what can be done. Already, as an experience described by Mr. Lewis Wingfield declares, the capacities of our hospitals and the resources of our vestries are overtaxed; and a slight increase of percentage, in a city like London, means an addition to the strain which it is difficult for an outsider to realise. One quarter after another, meanwhile, refuses to receive a small-pox hospital; and it seems possible that such institutions, supposing the call for them to increase, as very probably it may, will have to be placed so far from London, that the chances of recovery of the patient who has to take so serious a journey will be gravely diminished. So thickly populated is the entire district surrounding London, that there is scarcely a spot at which a small-pox hospital can be erected without endangering some of those rights of property of which the Briton is so tenacious and the law so careful.

NOT the least serious question opened out by Mr. Wingfield's letter is that of the value of our nursing sisterhoods. One and all of these, to whom Mr. Wingfield applied, declined to send a nurse to serve in a house in which there was small-pox. I do not deny that a woman may well hesitate to face the risk of so serious and loathsome a disease. For those, however, who in the profession of religion have formed a sisterhood, to decline such a call, is like a soldier refusing to join a forlorn hope. They may be volunteers. That, however, does nothing to free them from responsibility. Fancy our volunteer soldiers refusing, on account of the danger, to front an enemy when he had once landed! I hope this refusal to face danger will open men's eyes to the real value of not a few of the institutions in which women play at being nurses. In our hospitals the presence of lady nurses is not an unmixed blessing. I have spoken to patients who have felt the weariness and suffering of life in hospital augmented by the fact that they dared not ask ladies of gentle birth for the menial service they required. Though less brutal in

language, moreover, than the nurse of former times, the lady nurse knows how to make the patient wince when he has the misfortune to get into her black books. We are in a curious transition stage in many matters. When we have settled down to the new order of things, we shall find that in nursing, as in other matters, professional service is better than amateur, and shall learn that the sufferer is as often pained as cheered by ministrations that not seldom owe their origin to forms of mysticism, fanaticism, or hysteria.

A COMMENT, significant enough, upon the readiness of Roman Catholic nurses to accept a kind of ministration which their Protestant imitators decline, is furnished in a passage of Carlyle's *Reminiscences* which seems, somewhat curiously, to have escaped general attention. Two or three years before the commencement of the illness which terminated fatally, Mrs. Carlyle had visited a Roman Catholic establishment in Brompton, with an acquaintance who was in search of a nurse. So struck with the appearance and manner of the old French lady who was matron and manager was Mrs. Carlyle, that she declared, "If ever I need a sick nurse, that is the place I will apply at." When illness seized her, application was duly made, and a good-natured young Irish nun was sent in. After three days had elapsed the girl was withdrawn, and an elderly French nun was substituted. The rest I will give in Carlyle's own not too intelligible language:—"About three A.M. I was awakened by a vehement, continuous ringing of my poor darling's bell. I flung on my dressing gown, awoke Maggie by a word, and hurried down. 'Put away that woman!' cried my poor Jeannie vehemently; 'away, not to come back.' I opened the door into the drawing-room, pointed to the sofa there, which had wraps and pillows plenty; and the poor nun withdrew, looking and murmuring her regrets and apologies. 'What was she doing to thee, my own poor little woman?' No very distinct answer was to be had then (and afterwards there was always a dislike to speak of that hideous bit of time at all, except on necessity); but I learned in general, that during the heavy hours, loaded, every moment of them, with its misery, the nun had gradually come forward with ghostly consolations, ill received no doubt; and at length, with something more express about, 'Blessed Virgin,' 'Agnus Dei,' or whatever it might be; to which the answer had been, 'Hold your tongue, I tell you; or I will ring the bell.' Upon which the nun had rushed forward with her dreadfulest supernal admonition, 'impenitent sinner,' etc., and a practical attempt to prevent the ringing. I was really sorry for this heavy-laden, pious or quasi-pious, and

almost broken-hearted Frenchwoman—though we could perceive she was under the foul tutelage and guidance, probably, of some dirty muddy-minded, semi-felonious, proselytising Irish priest.”

IT is the boast of Rome that she does not change, and her servants are the same now as they were in the days of Rabelais. Compare with this statement of Carlyle the complaint and advice of the old poet Raminagrobis to Panurge, who, with his companions, went to consult him upon the great subject of his perplexity:—“I have this same very day (which is the last both of May and me) with a great deal of labour, toil, and difficulty, chased out of my house a rabble of filthy, unclean, and plaguily pestilentious rake-hells, black-beasts, dusk, dun, white, ash-coloured, speckled, and foul vermin of other hues, whose obtrusive importunity would not permit me to die at my own ease; for by fraudulent and deceitful pricklings, ravenous, harpy-like graspings, waspish stingings, and such-like unwelcome approaches, forged in the shop of I know not what kind of insatiabilities, they went about to withdraw and call me out of those sweet thoughts wherein I was already beginning to repose myself, and acquiesce in the contemplation and vision, yea, almost in the very touch and taste of the happiness and felicity which the good God hath prepared for His faithful saints and elect in the other life and state of immortality. Turn out of their courses, and eschew them; step forth of their ways, and do not resemble them; meanwhile, let me be no more troubled by you, but leave me now in silence, I beseech you.”¹

THE recent theatrical performances at the Princess's, the Lyceum, and Drury Lane, establish the fact that tragedy, long thought to have left us, is once more domiciled in our midst. Altogether different from past schools of acting is the school now re-established, and it seems as if we might hope to welcome back, in the shape of tragic acting, what has been a lost art. Into the merits of the many expositions of Othello and Iago that have been given I shall not enter, nor will I attempt anything so invidious as a comparison. It is but justice to say, however, that the immediate effect of witnessing a style in tragedy so moderate and so free from rant as that of Mr. Booth, has been to drive away from our stage the last remnants of the extravagance and mouthing which were long the curses of dramatic representation. The advance made by England during the last quarter of a century in many lines of art is sufficiently startling. In nothing, however, has progress been so marked as in theatrical performances. Between such representations as were given at the Lyceum

¹ *Pantagruel*, Book iii. chap. xxi. p. 291. (Chatto & Windus.)

when the company of Mr. Irving was strengthened by the temporary accession of Mr. Booth, and those seen fifteen years previously at Drury Lane, there is a difference as wide as that between the dramas of Marlowe and those of his predecessors.

IT appears that the sport of "pig-sticking," which constitutes a chief solace of our Indian officials, needs no long journey to Agra or Delhi, but can be enjoyed close to our shores. According to a statement in a daily paper, wild boars are sufficiently numerous within three miles of Dieppe, in the forest of Arques, not only to furnish a good day's sport, but to render some process of thinning indispensable in the interest of the agriculturists on the adjoining farms. I was unaware that game so large could still be found in Normandy. That wolves are numerous in some parts of France is, of course, generally known. I once heard a well-known ducal sportsman give an animated account of his adventures with a pack of foxhounds, which he took to Poitou for the purpose of hunting wolves. The embarrassment of the dogs, used to the smaller game, when they became aware of the power for mischief possessed by their new enemies, may be conceived. Few forms of sport in England are free from gross cruelty. The pursuit of the wild boar is, however, defensible on every account, and the sight of a French hunting-party is so picturesque and novel, that I fancy not a few Englishmen will be ready, when the hunting season comes round, to attempt to see it.

IN the *Modern Review* for April appears an article entitled "The Medical Profession and its Morality," which illustrates to the full how far in the way of utter unreasonableness a writer will occasionally proceed. The author strikes his key-note in the first page or so of his tirade. The whole race of doctors, according to this anonymous Solon, have assumed the attitude of a set of bullies towards every question in which they possess an interest. In their functions as public officers—coroners, health-officers, &c.—the doctors, says the writer, "are daily assuming authority which, at first, perhaps, legitimate and beneficial, has a prevailing tendency to become meddling and despotic." The arrogance of medical men who have the temerity to entertain opinions of their own on subjects connected with their profession, is a source of much concern to the *Modern Reviewer*; whilst the utter want of even common fairness in the tone of his remarks may be inferred from the following extract: "These simple hearts totally forget that a patient is to a doctor what a rock is to a geologist, or a flower to a botanist—the much-coveted *subject of his studies*. Very often, when the sufferer or his friends are

with tearful gratitude thanking the doctor for having remitted some portion of his fees, the learned man inwardly reflects that he would have paid a good round sum rather than have missed so curious a case." That is to say, a man is assumed to be incapable of feeling common human sympathy, and at the same time of regarding a case as a scientific study—by way, let us note, of suggesting measures for its relief. The *odium theologicum* comes out clear and prominent when, later on, we discover this polite reviewer insisting that every doctor is an atheist in disguise. To quote his words:—"Few prospects are more profoundly alarming than the advance to ubiquitous influence of an order of men who, as a rule, reject and despise those ultimate faiths of the human heart in God, and duty, and immortality, which ennoble and purify mortal life as no physiological science can ennoble and no physical sanitation purify." Now, this passage is one which reflects such a grossly unfair and libellous spirit, that I think I am right in saying the reviewer's words carry their own refutation writ large in their face. Firstly, it is simply untrue to say that doctors are more irreligious than other men. Secondly, as a class they are by common consent more self-denying than the bulk of the clergy. Thirdly, it is the most uncommon occurrence to find a doctor posing as a propagandist of any religious or theological ideas whatever; and fourthly, we believe men and women to be something more than mere automata, and to be capable of judging for themselves in matters pertaining to their various faiths, without the interference of the doctors—or the clergy either, for that matter. If the writer of the article we are criticising only knew it, he has destroyed any just and legitimate complaint he may have had, by a wanton excess of zeal. It is something to find the editor of the *Modern Review* alleging the grave sense of responsibility he felt in admitting the article in question to his pages. But the editorial mind—in this case a clerical one—thinks the medical profession needs to be warned and criticised. To this opinion I do not object; only I will add, that the editor should first be certain that his critic was both competent and unbiassed. In the case before me, the critic is a man whose opinions on most topics, judging from his remarks in the present case, must be of the most extreme kind. I observe that the editor invites replies to this precious production. His demand is, that the "purer spirits in the healing fraternity will speak out." I should have imagined that, judging from the opinions of his contributor, there were no "pure spirits" in the profession at all. There is just a suspicion that the whole procedure is a nice little plan to start a controversy from which I am of opinion that the *Modern Review* would benefit more than either the profession or the public. I conclude as

I began, by characterising the article as a foul, unjust and malicious libel upon a profession whose self-denying life and work are, as a rule, quite equal to those of the bulk of the ministers of the church.

SOME days after the appearance of the paragraph of Table Talk in which I drew attention to the fact that the door affording a means of exit in case of fire at a West End theatre—the Court—opened inwards instead of outwards, I visited the house, and found the same state of affairs still prevailing. Since that time, however, the Lord Chamberlain has been very busy with the theatres, and I hope on my next visit to find the cause for complaint removed. Little good attends the removal of chairs and strapontins from stalls and dress circle. These things, in case of fire, do good instead of harm, since they prevent people rushing in so frantic haste into the doorways. It is in the doorways that the chief crush occurs. Make your means of exit capacious as possible, and then managers may with safety make such inner arrangements as suit them best. Climbing over chairs in the case of fire is inconvenient, no doubt. So far from being a source of danger, however, it is a safeguard.

Since writing the preceding paragraph, I have seen the Licentiate of Plays, and have been told by that polite and scholarly official that the Court Theatre is outside his jurisdiction. Here is another proof, if such were wanted, of the manner in which things are managed in this country.

RIGHTLY or wrongly, the conviction forced upon the public mind is that in the treatment of lunatics terrible cruelty is still exhibited. Nothing is more difficult than to obtain full testimony in such cases, since the warders are always in accord, and the evidence of the poor victims cannot be accepted. All we know is that the bones of lunatics are not seldom found broken under circumstances that lead to the inevitable conclusion that the injuries are ascribable to violence. When, accordingly, a case is brought home, and it is proved that the injuries inflicted upon a patient in the Colney Hatch Asylum are attributable to the kick of a warder, to send the brute back to his work with a fine of forty shillings is a wanton insult upon justice. It is quite conceivable that there is a fund at the asylum to meet such cases, and it is certain that a man who is capable of an act such as that of which the warder in question was convicted is likely upon his return to "take out the amount of his fine. The management of the asylum owes it to the public to state if the offender has been re-admitted,





would certainly themselves suppose that the name either meant the town of deer (or wild animals) or that it was derived from the name of an owner, Dÿri. In all probability, however, the name was suggested by the sound of the river-name Derwent. It is to be noticed that two places named Darley are found on the same river, and on the Yorkshire Dearne there are places named Darfield and Darton.

Our present name of York is a contraction of the Danish form Jorvik. This, again, is a corruption of the Anglian Eoforwic, which (meaning "wild-boar-town") is an attempt at making sense of the British name, which is known to us in the Latin form Eburacum. The analogy of similar names in Gaul and Spain would lead us to suppose that Eburacum is derived from the name of a river Ebura, which would therefore seem to have belonged to the Ouse.

The name of Durham is a Norman corruption of Dúnholm, which means the holm or meadow-land surrounding a hill.

The three northern counties, Northumberland, Cumberland, and Westmoreland, resemble in their origin and nomenclature rather the counties of the Southern than those of the Midland group. They were originally not mere administrative divisions, but territories of distinct populations; and their names are not derived from towns, but are descriptive of the entire regions to which they are applied.

The name of Northumberland, as everyone knows, originally belonged to the whole of the English land north of the Humber. When the shire of York and the bishopric of Durham had been carved out of this undefined tract, the original name naturally became appropriated to the remaining portion. It thus happens, curiously enough, that the etymology of Northumberland involves that of the name of the Humber, a river from which the county is nearly eighty miles distant. Various attempts have been made to explain the word Humber; but most of them are set aside by the fact that the name is borne by several minor streams in various parts of England, and therefore cannot well have any meaning which is only appropriate to a large river. There seems to be no valid objection against reading it as *ynfer* (the Cymric equivalent of the Gaelic *inbher*), which denotes the junction of a river either with a larger river or with the sea. The modern Welsh form, Hymyr, presents no difficulty, as it is evidently derived from the English name.

Cumberland (in the Saxon Chronicle, Cumbraland) is commonly explained as the land of *combes*, or valleys. This interpretation, however, is grammatically impossible, and there is no doubt that the name means the land of the Cymry. The name was given by the Scandinavian conquerors of the north-west. The Britons of the

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SYLVANUS URBAN.



